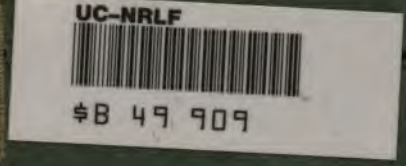


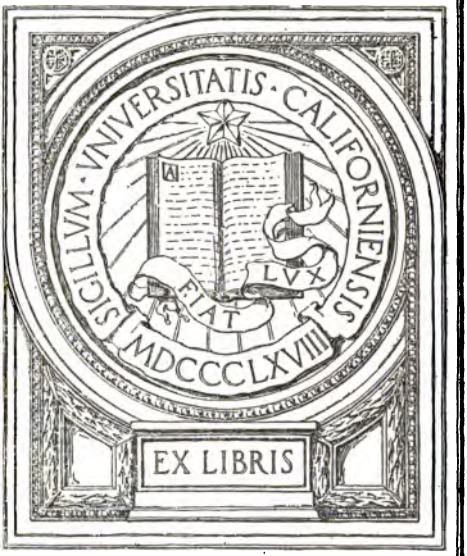
THE INDIAN MARKET

—A—

COMMERCIAL AND ECONOMIC DIGEST FOR THE EXPORTER

BY

F. A. WILLIS



THE INDIAN MARKET

A COMMERCIAL AND ECONOMIC DIGEST FOR THE EXPORTER

By F. A. WILLIS

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Carpentier

PREFACE.

It is a well acknowledged fact, and we might as well face it, that the executives or those governing the foreign policies of our large industrial organizations, do not find the time to read through volumes of economics on various countries. Their knowledge of the politics and religion of the people is often superficial, yet both of these factors are frequently of vital importance to the future of our trade. The representatives who are sent to foreign fields by our manufacturers, are generally too occupied with the business in hand, namely, immediate sales and commissions, to make a sound study of the market. They almost always return to their home offices with a report of conditions; but frequently this is of little more practical use than the impressions of a seasoned tourist.

It can be plainly seen, therefore, that a work is needed, which, in a condensed form, will bring out, first, the economic conditions of the country, and then its commercial possibilities as a market for our wares. The most casual reader can see the relation of one to the other. A work of this sort should also contain much general and useful information for those contemplating a trip to the country and, for the purpose of convenience, should be so written or indexed that the busy executive can quickly turn to the subject desired. It should be a pamphlet and not a large volume, for then it can be conveniently carried about in the pocket. A pamphlet of this sort, however, cannot cover the entire possibilities for each type of article manufactured. For such information the manufacturer must send a man to the country to study the opportunities for his particular commodity.

India, with the possible exception of China, is the world's largest independent market, and contains one-fifth of the human race. It is rich in mineral deposits and produce—yet how much is known of it as a market? Due to its great distance, its trying climate and its prejudice in favor of British trade, we have long neglected it. I cannot help but feel that the time to enter a market is when things are at their ebb; then one's business grows correspondingly with the return to normal conditions. And not this alone, for in extending a hand of friendship when conditions are bad, and in showing that we intend to enter the field permanently, our reputation also is greatly enhanced. If we wait until the wheel is fairly spinning and then jump on, the effort to reach the hub will be greater and less sure, for there will always be those ahead.

The pleasant task of compiling this pamphlet was not really a contemplated one on my part. It came about or was prompted by a letter I received from the Department of Commerce in Washington. Primarily they had written a member of the firm with which I am at present affiliated, and asked for suggestions as to the type of information they should secure from India, which would be the most beneficial to our manufacturers and merchants, as well as to the general promotion of our trade. This letter was handed to me for reply, and I sent them a very long and complete questionnaire. The result was that I was subsequently asked to answer, for their information, as many of the questions as I could.

Realizing that many of these questions were small articles in themselves, if properly answered, and that there was a great lack of continuity of thought, I decided it would be more to the point to compile a small pamphlet covering the more important facts.

I was in a rather fortunate position to do this, for my grandfather having served throughout the Mutiny, and my father having been born in India, my interest in that country is hereditary. I have further had the opportunity of personal experience in trading with India as the export manager of two firms, and have spared no effort in making an exhaustive study of India as a market.

Though this pamphlet does not pretend to be exhaustive, nevertheless the facts contained have been obtained from the most recent and authoritative sources during the past three years. I want it to be of interest to all who may care to read it; and can hope for no more than that it will be of service.

F. A. WILLIS.

CONTENTS.

FOREWORD.

In compiling this pamphlet, I have endeavored to furnish as much information and general knowledge essential to Manufacturers and Merchants contemplating trade with India, as can be given in a small amount of space. I have purposely not furnished facts on the routine of export and shipping papers, etc., for such information is generally known and easily accessible by applying to proper sources at home. In every handbook or authoritative work on India, there is much information not necessary to the average export manager, who, because he is trading in many countries of the world, cannot become an authority on any one, and must, of necessity, seek out only the more important facts and knowledge relative to each country's trade. I have, therefore, tried to eliminate any unnecessary facts.

As India is a country which only recently became of commercial importance to our Manufacturers and Merchants, and as it is at all times difficult to obtain recent information on commercial conditions in the country, the Department of Commerce should furnish a work dealing with the most important conditions in India, of benefit to our Manufacturers and Merchants. A yearly report would be of the greatest advantage.

In any work dealing with India, generalities should be avoided, because it is a country where conditions in almost every Province, Presidency, and State vary, frequently to a marked degree. Due to limiting my space I have, however, been forced to generalize, particularly in costs and rates of various wages and for various expenses. In all such cases it must be remembered that prices of almost everything are highest in Calcutta, then in order, Bombay, Madras, Karachi,

Rangoon, and up-country centres. This general condition also applies relatively to the environments of the cities mentioned. Conditions are constantly changing in India and for any decision of great importance it would be well to get the most recent prices and facts by cable. The data and information contained in this pamphlet applies in some cases to 1919; but in general to 1921, even up to the last six months.

It is impossible for one person to have an intimate personal knowledge of all commodities, costs, and conditions of Trade with India, unless he makes such a study his life work. Even then he would find conditions continually changing. In order, therefore, to supply as much correct information as possible, and in cases where my personal knowledge and experience have been limited, I have referred to authoritative works for the necessary data, and have tried to obtain the most recent and complete works of such authorities. Statistics of Industrial Wages, Competition met with in various Articles, Distribution of Crops and Rainfall, etc., have been in most cases abbreviated or are direct extracts from the works of various economists and authors. To the following authors and their works I am indebted for much statistical information:

Sir John Strachey—"India, Its Administration and Progress."

Prof. Jadunath Sarkar, M. A.—"Economics of British India," Fourth Edition.

Mr. Thomas M. Ainscough, O. B. E.—"Report on Conditions and Trade in India."

Sir Theodore Morrison—"Economics of British India," Fourth Edition Revised.

Sir Stanley Reed, LL. D.—"India Year Book, 1921."

Archibald A. C. Dickson—"Mica Miners' and Prospectors' Guide."

1.

GEOGRAPHY AND POPULATION.

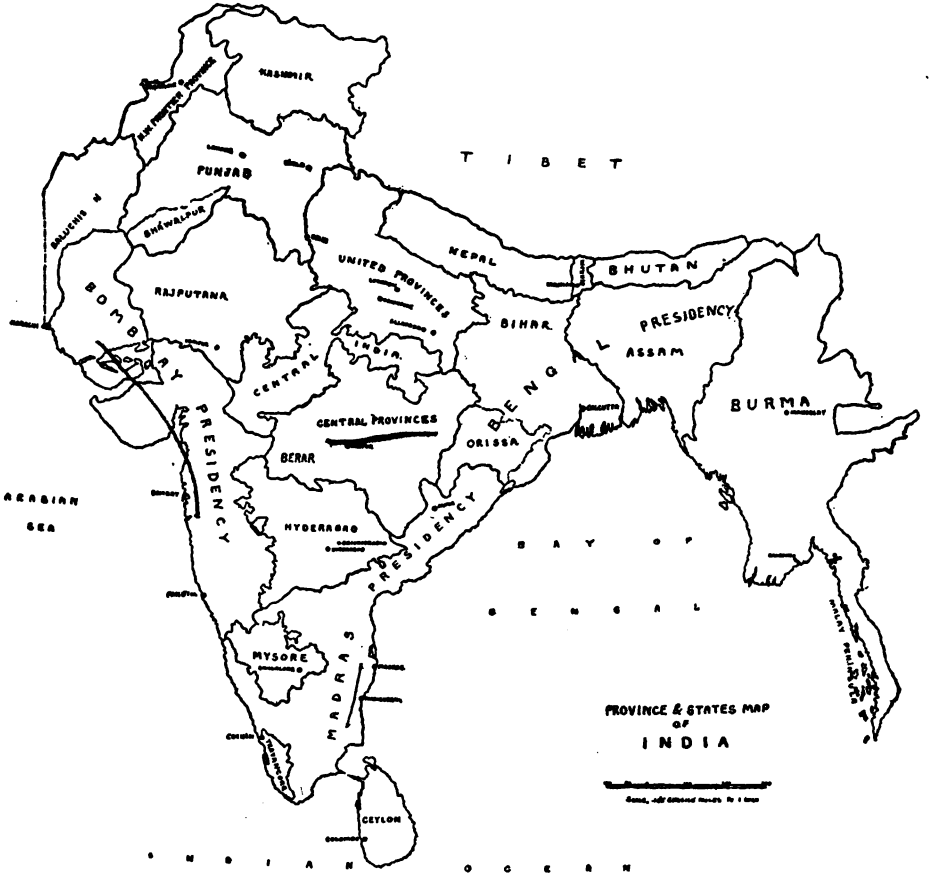
India, including Burma, contains over one and three-quarter million square miles, with a population of approximately 350,000,000 peoples—about one-fifth of the human race. Roughly, the population is divided as follows:

United Provinces	19.5%	of population
Bengal Presidency	18.6%	" "
Madras Presidency	16.9%	" "
Bihar and Orissa	14.1%	" "
Punjab and Northwest Frontier Province	9.0%	" "
Bombay Presidency	8.0%	" "
Other divisions	14.9%	" "

(A) The Average Density of Population for the Indian Empire is about 175 to the square mile, though in some sections it runs as high as 1,800 (not average), Native States, about 100 to the square mile.

(B) India may be divided into three well defined regions:

1. The Himalayas.
2. The Northern River Plains.
3. The Deccan or Southern Tableland.



2.

CLIMATE AND SEASONS.

(A) THE MONSOON. There are two Monsoons in India, namely, the Northeastern Monsoon, from December 15th to the end of March—very dry, cool. Only about 10% of the rainfall is then received. These winds frequently produce light rain and storms in Upper India and snowfalls and high winds in the Himalayas. This rain is very important for the Punjab. From March to May there is a hot weather rain, very useful to Assam.

The Southwestern Monsoon (90% of India's rain) is from June to September. In October the rainfall soon ceases. The Bombay Current begins to give rain in the early part of June, about two weeks before the Bengal Current. In order to insure good crops the rainfall during the Monsoon should be punctuated by spells of clear weather between the periods of rain. In general, any Monsoon is good, as long as it is wet. The rainfall should not vary greatly from year to year, as the young crops would be washed away or burnt up. The health and purchasing power of the people depend largely, from year to year, on the result of the Monsoon.

*(B) Normal rainfall may be pro-rated approximately as follows:

EXCESSIVE RAINFALL.

Malabar Coast	127	inches
Lower Burma	123	"

*Professor Jadunath Sarkar, M. A., "Economics of British India," Fourth Edition.

Konkon	109	inches
Assam	98	"
Bengal (Lower)	92	"
Eastern Bengal	85	"

HEAVY RAINFALL.

Western Bengal	59	"
Orissa	57	"
Chota Nagpur	53	"
Central Provinces (East)	53	"
Bihar	50	"

MODERATE RAINFALL.

Upper Burma	42.2	"
Central Provinces (East and West)	45.1	"
Madras Coast (North)	40.3	"
United Provinces	39.4	"
Mysore	36.5	"
Nizam's Dominion	35.7	"
Berar	31.1	"
Guzerat	33.6	"
Bombay Deccan	31.9	"

SCANTY RAINFALL.

Madras Deccan	24	"
Rajputana (East)	24	"
Punjab (East and North)	23	"
Rajputana (West)	12	"
Punjab (Southwest)	9	"
Sind	6	"

3.

*DISTRIBUTION.

of

CROPS AND MINERALS.

(For Indian Weights and Measures See Page 81.)

(A) CROPS.

RICE: One-third of India's cultivated land is under rice—eaten by Bengalis, Assamese, Uriyas, Madrasis, Biharis and Marattias. Grown in hot and damp climate, requires 36 inches of water. Generally only one crop raised a year. (In Bengal, 2 sowings, but not in same field.) The usual yield of rice per acre is 30 maunds of paddy.

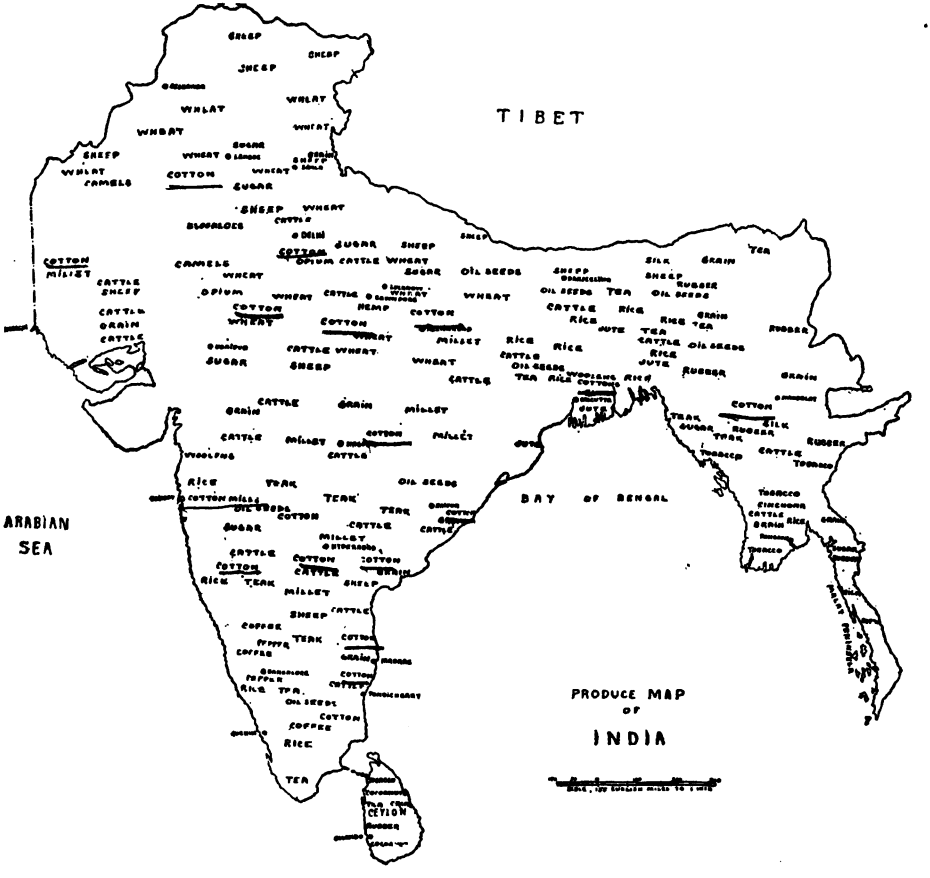
WHEAT: Second largest consumed foodstuff in India, chiefly among Southern India people, in Central Provinces, Bihar, United Provinces and the Punjab. Grown in cold weather, requires light rains—sown late in October—harvested in April or June. Irrigated area wheat yields about 15 to 20 maunds per acre.

MILLETS: (Jawar, Bajra and Ragi), eaten by poorer classes, staple crops of dry area. The yield is about 8 maunds per acre.

PULSES: Second in importance among foodstuffs, grown as a second crop of year in rotation with some principal crop. Requires little rain or watering—grown in winter (sown October—reaped March)—yield, 7 to 10 maunds per acre.

SUGAR CANE: Mainly grown in United Provinces, the Punjab, Bihar and Bengal; some two and one-half million

*Abbreviated Extract, Sarkar, 4th Edition.


TIBET
ARABIAN SEA
BAY OF BENGAL
CEYLON
PRODUCE MAP OF INDIA

acres under cultivation; requires much water and well drained soil; takes year to ripen; yield of unrefined sugar (gur) from one and one-half to three tons per acre.

TEA: Requires well distributed rainfall of about 100 inches; usually grown from 300 to 700 feet above sea level. Grown chiefly in Bengal, North East Bihar and Assam.

JUTE: Grown by rivers and low lying lands, should be partly submerged at first. On higher lands much fertilizer and irrigation must be used. Sown in April, cut in September; usually yields about 15 maunds clear fibre—in good years might yield 25 or 30 maunds.

COTTON: Grown chiefly in Sind, Madras, Central Provinces and Bombay districts. It yields about one and a half maunds of fibre and three and three-quarters maunds of seed per acre.

FORESTS: Cover about 20% of total area of India, about 60% of Burma, 45% of Assam, 17% of Central Provinces, 9% of Bombay, and 8% of Punjab, 13% of Bengal, 3% of Bihar and Orissa. Chief commercial woods are Teak, Myrobalsam, Rubber, Sandalwood and Ebony.

(B) CROP RESOURCES BY PROVINCES.

UNITED PROVINCES: First in Sugar, second in Wheat, third in Millets.

BOMBAY: First in Millets, second in Cotton, third in Oil-seeds.

BURMA: Fourth in Rice and Oil-seeds, fifth in Tobacco.

MADRAS: First in Oil-seeds, second in Millets and Tobacco, third in Rice, Cotton and Tea.

BENGAL: First in Rice, Jute and Tobacco, second in Tea.

BIHAR: Second in Rice and Jute, and third in Oil-seeds, Sugar and Tobacco.

ASSAM: First in Tea and third in Jute.

CENTRAL PROVINCES AND BERAR: First in Cotton, second in Oil-seeds, third in Wheat.

THE PUNJAB: First in Wheat, second in Sugar and fourth in Cotton.

(C) MINERALS.

COAL: Chief fields are—Jharria, Raniganj, Giridih, Daltonganj, Rajmahal, Ramgarh, Bokaria and Sambalpur, all of Bengal and Bihar. Outside of these Provinces, near Hyderabad, are the next best fields. Other fields are in Assam, the Mohpani Mines of the Central Provinces, the Khost and Sor Range of Baluchistan, the Salt Range of the Punjab and the Bihanir Mines.

GOLD: Chiefly from Mysore fields at Kolar and other places; others are the Hutti Mines in the State of Hyderabad and the Anantapur District of Madras.

MANGANESE AND CHROME ORES: From the Central Provinces, Madras, Bombay, Bihar and Mysore.

MICA: Chiefly from Chota Nagpur, Madras and Rajputana. India supplies about one-half of the world's mica.

PETROLEUM: Chiefly in Burma, Assam and Punjab.

IRON: Chiefly in Bengal, Bihar and Orissa; some in Central Provinces and Chota Nagpur.

SALT: Evaporation—from Madras, Bombay, Sind and Burma; also from lakes in Rajputana. Rock Salt—from Salt Range, in the northwest Frontier Provinces and the Salt Mines in the Punjab.

AMBER AND GRAPHITE: Amber is found in small quantities in Burma—Graphite, mined to some extent in Travancore.

TIN: The only persistent attempt to mine it has been in Burma; production approximately 116 to 175 tons annually.

COPPER: Chiefly found in Southern India, Rajputana and along portions of the Himalayas (no attempt is made to utilize by-products—simply smelted for metal alone).

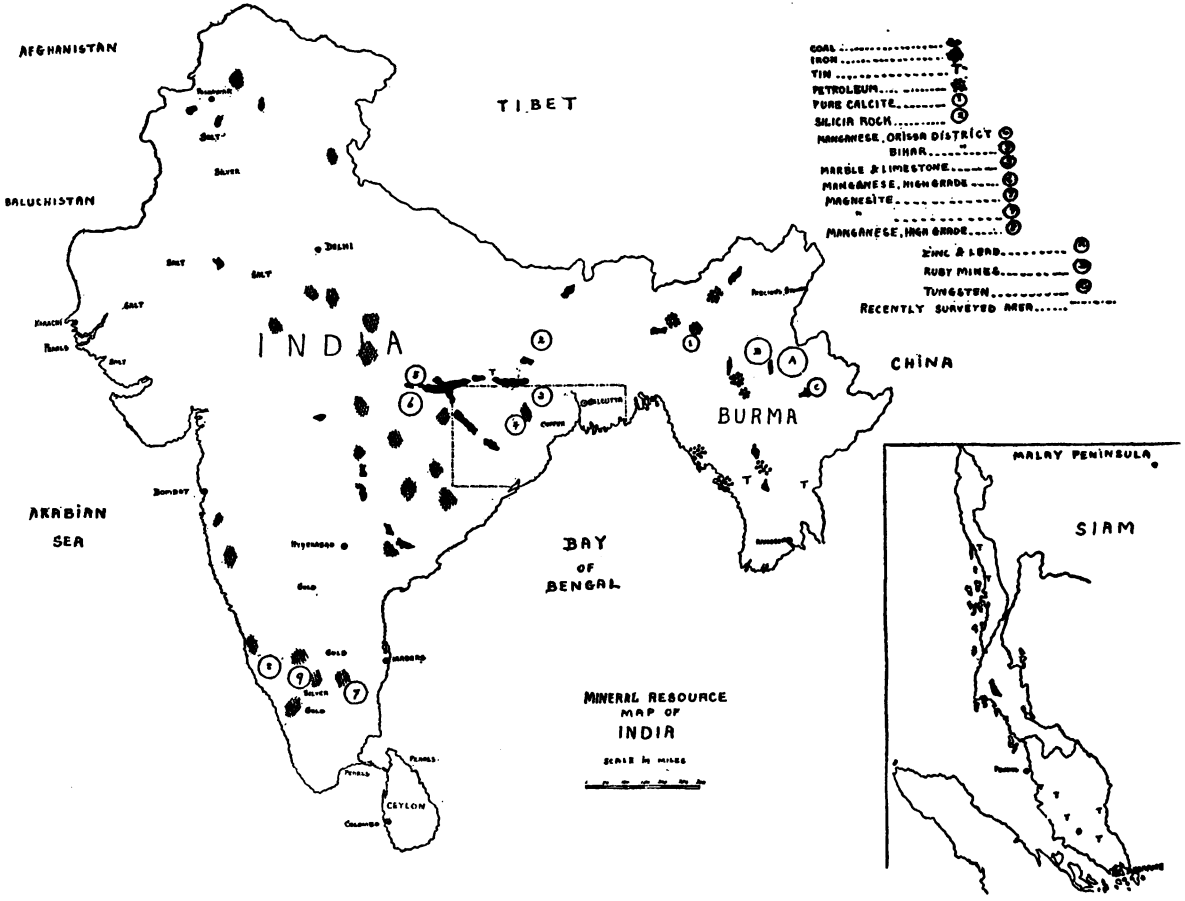
LEAD: The only lead mine of any importance being worked in India is the Badwin Mines. Production varies from about 7,000 to 12,000 tons yearly.

SILVER: Obtained as by-product from lead-zinc ores of Badwin Mines, also some produced at the Anatapur Mines—

production from one million to one and three-quarter million ounces yearly.

PRECIOUS STONES: Ruby, sapphire and jadeite only ones of commercial importance, though diamonds and semi-precious agate formations are found. Undertakings chiefly in Burma.

WOLFRAM: Chiefly mined in districts of Merguj and Tavoy in lower Burma, also in Malay Peninsula.


AFGHANISTAN
TIBET
BALUCHISTAN
INDIA
CHINA
BURMA
ARABIAN SEA
BAY OF BENGAL
CEYLON
MALAY PENINSULA
SIAM
COAL
IRON
TIN
PETROLEUM
PURE CALCITE
SILICIA ROCK
MANGANESE, ORISSA DISTRICT
BIHAR
MARBLE & LIMESTONE
MANGANESE, HIGH GRADE
MAGNESITE
MANGANESE, HIGH GRADE
ZINC & LEAD
RUBY MINES
TUNGSTEN
RECENTLY SURVEYED AREA
MINERAL RESOURCE MAP OF INDIA
SCALE 1/4 MILES

4.

GENERAL DESCRIPTION
of
MINERAL DEPOSITS AND MINES.

(A) Coal. The deposits of coal in India and their proper development form a most important factor in the indefinite extension of the country's iron and steel industries. Generally speaking, the coal now being worked in India is near the surface and labor is comparatively cheap. A great deal of the mining of all ores in India might be said to be more like quarrying than mining, as known in this country. The cost per ton of coal, wholesale, at the pit's mouth, varies considerably in all parts of India. The present price is an average of about 12 shillings. The working costs, which formerly were very low, have risen to about five shillings per ton and will probably increase some 20% in the next three to five years. The cost of production in the various fields ranges as follows (from the lowest to the highest): Jherria Fields, Raniganj Fields, Giridih Fields, Central India and Central Provinces, The Punjab.*

The present total output in India is about 20,000,000 tons, of which some 700,000 or 800,000 tons are coking coal. The output of coking coal in the next few years should triple the present supply.

The use of machinery (particularly electrical) is extending very rapidly in the Indian mines. Electrical machinery is used largely at present for hauling and pumping. Me-

*Bengal, Bihar and Orissa are undoubtedly the largest coal producing areas.

chanical coal cutters and the most modern machinery is now beginning to be used in some of the collieries, particularly where the seams are narrow and remote from the surface.

All Indian coal varies in quality to a greater degree than English coals. The seams are usually thick, some 7 to 20 feet being a common thickness; the dip is usually 1 in 5; the roofs are good and water troubles normal. The general method of working is bored and pillar. The washing of inferior coal is now under investigation.

An average analysis of good Indian coke shows:

Moisture	3% to 5%
Ash	19% to 21%
Volatiles	2% to 3%
Fixed Carbon	76% to 77%

While there are some by-product coke ovens in India the extraction of Benzol has not yet been introduced.

*(B) MICA. The chief Mica Mines in India are:

Alukdeah	Ganwan	
Taraghatty	Dhanwar	
Charki	Sauka	Mostly in the following districts:
Pipraghat	Kharonia	
Dhab	Kararia	Nellore (Madras Presidency), Bihar, Orissa and Amjer-Merwara.
Mine 326	Kushana	
Basron No. 1	Meghatory	
Basron No. 2	Kodarma	
Sootea	Chatkari	

The Mica mined in India belongs entirely to the Muscovite variety. The main types of Mica mined in India and consumed in various countries in the world to which India sends her Mica, are the following: Ruby Clear, Ruby fair stained, Ruby stained, Black spotted, Special and Ordinary Splittings No. 1 to No. 6, and Block Mica from No. 6 up to special. The Mica Mines and the industry in general are

*Based on Archibald A. C. Dickson's "Mica Miners' and Prospectors' Guide."

handled by a very few syndicates, probably not more than 6 or 8 in all India.

DRILLING: Air compressors are more suited to mine with than steam. Hand-drilling is still in favor with the operators, though the double-handed drills are becoming more numerous. Recently labour-saving devices have come in, particularly for the raising of rock and water from the mines. The double-acting pumps are usually used for all shallow unwatering at a depth up to 30 feet. Semi-rotary pumps are good for prospecting work, but are not successful in many of the mines, due to careless handling, etc.

For deep mining some form of horizontal steam sinking pump has been found best (the Pulsometer type). Siphon draining is sometimes used, but not over a crest above 21 feet. Mica mines are left to ventilate themselves unless they become uncomfortably hot, in which case shafts are put in from necessity. Lighting is done by candles, which have proved the most efficient.

(C) CHROME AND MANGANESE ORE. Most of the Chrome and Manganese Ore deposits in India are found in the following districts: Central Provinces, Madras Presidency (Bangalore), Mysore.

India supplies more of these ores than any other country in the world, with most of her production coming from the Central Provinces. The principal considerations in the purchasing of these ores are the Chrome content, the Alumina content, the Iron content and the Iron Oxide content. The general market buys Chrome Ore 48% or over, with 6% Silica. Others like the ore to be 50% with not more than 4% Silica. It must have a low iron content. Most of this type of ore is shipped from the ports of Madras and Marmogoa.

Sampling and weighing is generally done by recognized assayers and weight as weighed by the railroad over whose line the ore is shipped, is basis for contract. Quotations must be C. I. F. North Atlantic ports.

The usual grade reaching this country is of the following analysis, after drying:

Chromium 35.20%
Equivalent to Chromium Sesquioxide ($CR_2 O_3$).....51.45%
Iron 15.70%
Silica (by fusion) 4.93%

(D) PETROLEUM. The chief sources of supply of Petroleum in India are in the Punjab, Baluchistan, Assam and Burma. The Petroleum for the most part is found in sandstones and loose-textured substance. It is chiefly obtained by boring and pumping. The Burma fields are far ahead of those in India proper and contain in many cases natural reservoirs. Most of the Oil business is in the hands of two Scotch companies. The American Standard rig is used for drilling, and most of the pumps, engines, tools and pipes are American makes, and many of the drillers and field managers are Americans.

5.

LABOUR.

*Its Efficiency, Sources, and Wages.

(A) General Characteristics.

(For Indian Currency, See Page 80.)

1. The peasants are industrious and patient, particularly in Bihar; they are steady, diligent and self-reliant.
2. In Bengal and Assam they are languid and fond of rest.
3. In Bombay and Upper India they are strong and hard-working.
4. They are dishonest in matters of cheating and pilfering stores.
5. They are free from drunkenness and gambling.
6. They are not reliable, and follow no regular standard of good workmanship.
7. They cannot be left to themselves and be trusted to work hard or to take care of their tools and materials.
8. They have no desire for wealth, no ambition to rise by superior exertion to a higher scale, or no pride in their work.
9. They lack originality or initiative.
10. Most of the efficient labor is drawn from the cooler, drier climates in the North.
11. The result is, though cheap in wages, in the long run the expense is great and the cost of supervision tremendous.
12. They are, however, more passive and docile and less apt to strike—until recently.

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*Based on Sarkar, 4th Edition, and Sir John Strachey and Thomas Ainscough, O. B. E.

13. When they do strike their strikes are badly planned and cause great loss to themselves and their employers.

*(B) WAGES. (January, 1919.)

1. Cotton Industry.

(*Rate per Month in Rupees.*)

Card Room.

Scutchers,	13.5
Grinders,	16.
Card Tenders,	12.
Lap Carriers,	12.
Fly Carriers,	9.5
Sweepers,	8.
Drawer,	15 —20
Slubber,	16 —22
Intermediate,	16 —22
Rover,	16 —23
Spare Hands,	13.5
Doffer,	11.5—12

Ring Throstle Room.

Side Minders,	15.5
Doffer,	11.5
Doff Carrier,	13

Reeling Room.

Reeler,	10 —12

Bundling Room.

Presser,	19 —20
Dresser,	16

Sizing Dept.

Winder,	9.5—17
Drawer,	20 —35
Warpers,	25 —38
Sizer,	38 —55
Back Sizer,	17 —25
Reachers,	10 —16

Weaving Dept.

Weaver,	18 —60
Jobber,	45 —75
Folder and Bundler,	14 —18

2. WOOL INDUSTRY. (Cawnpore.)

(*Rate per Month in Rupees.*)

Mule Room.

Head Mistry,	70.20
Minders,	15.19
Piecer,	7.61
Spare Hands,	9.02

Card Room.

Head Mistry,	44.89
Feeder,	10.43
Mixer,	9.49
Card Cleaner,	18.96
Spare Hands,	9.83

*Extract from Report of Thomas Ainscough, O. B. E., on Trade with India, 1919.

Finishing Dept.		*Engineering Dept.*	
Washing and Bleaching Mistry,	30.06	Boiler Mistry,	25.19
Washing and Bleaching Man,	9.43	Engine Man,	39
Dyeing Mistry,	19.50	Oilman,	10.19
Dyer,	9.75	Head Carpenters,	60.94
Finishing Mistry,	40.62	Boiler Man,	14.81
Finishing Man,	9.07	Carpenters,	16.80
Weaving Dept.		Blacksmith,	26.47
Mistry,	28.	Fitter,	20.77
Healer,	12.60	Turner,	27.25
Weaver,	15.51	Tinsmith,	18.65
		Mochi,	11.11

3. COAL MINING. (Bengal, 1919.)

(*Rate in Rupees per Day.*)

Raniganj.		*Sanctoria.*		*Sodepur.*	
Miners,	.4	Miners	.45	Miners	.45
Blacksmiths,	.4	Blacksmiths,	.5	Blacksmiths,	.5

4. TEA INDUSTRY. (Assam, 1919.)

(*Rate in Rupees per Month.*)

Active Labourers.		*Non-Active Coolies.*	
Men,	8.1.6 R. A. P.	Men,	6. 4.3 R. A. P.
Women,	7.9.5 R. A. P.	Women,	5. 1.2 R. A. P.
		Children,	2.13.5 R. A. P.

5. JUTE INDUSTRY. (Bengal, 1919.)

(*Rate in Rupees per Week.*)

Carding	2.18
Rovers	4.25
Spinners	3.75
Shifters	1.65
Winders	4.55

Beamers	5.49
Mistries	4.09
Coolies	1.88

6. LOCOMOTIVE AND ENGINEERING WORKSHOPS. 1919.

(*Rate in Rupees per Day.*)

Lahore.		Meerut.	
Skilled Labour.		Skilled Labour,	.5
Fitters,	1.13	Unskilled Labour,	.31
Carpenters,	1.37		
Unskilled Labour,	.55		

7. LEATHER INDUSTRY. (Cawnpore, 1919.)

(*Rate in Rupees per Month.*)

Foreman	32.
Fitters	20.
Machine Operatives	25.3
Accoutrement Makers	22.
Saddlers	27.5
Saddlers' Assistants	13.4
Work Distributors	11.
Belt Makers	11.1
Cutters	12.
Curriers	12.
Storeman	9.
Tanners	10.
Messengers	8.

8. PAPER INDUSTRY. (Bengal, 1919.)

(*Rate in Rupees per Month.*)

Coolies	12.
Machinemen	27.
Bricklayers	16.
Vicemen	30.

Women	7.
Blacksmiths	28.
Carpenters	20.
Enginemen	15.

9. BREWING INDUSTRY. (Punjab, 1919.)

(*Rate in Rupees per Month.*)

Head Coopers	35.
Coopers	23.
Smiths	28.
Masons	23.67
Coolies (Light Work)	11.
Coolies (Heavy Work)	12.
Head Maltman	15.
Maltmen (Coolies)	11.

10. RICE INDUSTRY. (Rangoon, 1919.)

(*Rate in Rupees per Month.*)

Head Blacksmith	50.
Fitters	55.
Carpenters	70.
Engine Driver	55.
Turner	50.
Mill Tindal	75.
Stone Mistry	40.
Mill Coolies	14.

(C) WAGES OTHER THAN INDUSTRIAL.

1. Indian labourers, outside of industrial plants, are usually working for their own account.
2. A farm labourer usually gets from his master free meals, lodging, and a certain fixed portion of grain. He occasionally gets a small gift of a piece of cloth or something else.
3. Frequently in Bengal a cash wage is paid in addition to free meals.

4. Village artisans and domestic servants are paid generally in kind.
5. Wage rates vary greatly in different parts of the country.
6. The labour supply, in general, is far below the demand, due chiefly to extensions of railways and canals; the recent industrial boom causing increase in mills, mines and factories; Bubonic plague prior to 1911; and general mortality due to tropical fevers and sickness.
7. Wages of domestic servants and some office employees have recently undergone an increase of about 50%—their fees, however, are still very small.*

†(D) HOURS AND CONDITIONS ABOUT PLANTS.

1. Hours of employment in factories are limited to 12 per day in case of men, 11 in case of women and 6 in case of children. No child shall be employed without certificate of age and physical fitness.
2. Some mills are reducing these hours with advantage.
3. Indian labourers, as a rule, prefer a longer stretch of light work rather than shorter hours of harder work.
4. Absentees in Indian factories generally average per day about 10% of the strength (particularly during harvest time).
5. Working hours in textile factories, applying in some respects to other plants, are generally from 5.30 A. M. to 7.00 P. M., with one-half hour allowed every six hours for rest and a full holiday once a week. Frequent interruptions occur in work, due to religious holidays and local events.
6. Housing conditions in Bombay for labour are very bad. Mill hands live in chawls (buildings divided into stalls or single rooms); they are generally several stories high—very unsanitary and overcrowded.

*A further discussion of domestic servants and household expenses is contained in Chapter XIV.

†Based on Indian Factories Act—1911.

7. General conditions about plants vary in different parts of India. Some are absolutely up to date, and all care taken for health, education and recreation of employees.
8. Education in general, of plant hands, is taking rapid strides; with the idea of eventually having native skilled labour to draw on from one generation to another.

6.

*CONSIDERATIONS CONTINGENT ON ERECTING PLANT IN INDIA.

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1. Cost of mill erection in India is approximately double that of similar erection in this country.

2. Cost of repairing and replacing machinery is very heavy.

3. Capital has to be raised at a higher rate of interest in India—frequently 50% higher.

4. Labour, though initially cheaper, is far less efficient, and, in the end, possibly more costly or as great.

5. Attendance and sources of labour supply are generally bad.

6. Borrowed money for building purposes usually costs from 7% to 10% per annum.

7. The manufacture of an article must frequently include all phases and accessories from raw material to finished article, including packing boxes, cases or cartons, etc.

8. Though India offers a splendid opportunity for the investment of foreign capital (as a local market), it is a poor distributing point to other foreign ports.

9. The climate and its effect must be seriously considered.

10. Probably the best opportunity for local manufacture lies in the following articles: Cement, heavy castings,

*Based on Sarkar, 4th Edition, and Thomas Ainscough's Report, 1919.

pipes, tubes, structural steel, cotton and jute mill machinery, rubber machinery, machine tools, sugar plants, water works plants, railway equipment, rolling stock and small pumps; in general, any article for the finished product of which there is a continual and large demand in India, where the raw materials are close at hand and where freight rates form an important percentage of cost.

11. Taxation is very moderate.

7.

INDIAN CURRENCY.

(For Currency Values, Weights and Measures, See Currency Tables on Page 80.)

In 1899 an Act was passed, declaring English gold coin should be legal tender in India at the rate of one sovereign for 15 rupees, and that the Indian mints should be open to the free coinage of silver to the public. The present currency system is, roughly, as follows: The metallic currency of India, in ordinary use by the people, is a silver token currency of enormous magnitude. Gold is the standard value, but silver is a legal tender to an unlimited amount. The system in force is somewhat similar to the principle which has prevailed for many years in France. Speaking generally, one might say India was internally on a silver basis and externally on a gold basis. The profits on the coinage of silver are necessarily large; they are not treated as revenue, but are held as a special gold standard reserve, available for the maintenance of exchange, and they are, for the most part, invested in sterling securities in England. The Indian Government coins rupees, not for the sake of additional profits, but in response to an effective trade demand. The intention of the Government is to secure in the currency reserve and gold standard reserve, combined, about 25 millions in gold and gold securities. This stock of gold is thought to be sufficient to maintain the exchange basis of the Indian currency system. One method of increasing the gold standard reserve is by using the gold it receives from merchants, to buy silver and coin rupees, the profit from coining rupees to be turned into the gold standard

reserve. Before coinage is resorted to, however, the Government substitutes sovereigns or gold securities for rupees as far as is prudent, in the reserve held against the note issues.

Many diverse opinions are constantly being heard in regard to a new standardization of the rupee value. No action has been taken as yet. However, this matter should be closely watched, as probably in the near future certain currency and financial legislation may be effected, the influence of which will be broadly felt in trade.

8.

INDIAN RAILWAYS.

Generally speaking, the railways in India, which are managed by companies, have Boards of Directors in London, and are represented in India by an Agent, assisted by a Traffic Manager, Chief Engineer, Locomotive Superintendent, a Storekeeper, Police Superintendent (appointed by Government), and an Auditor. The Native State Railways are organized in much the same way.

The total length of railway lines open to traffic in 1918 in India was 36,333 miles, of which 17,876 miles were standard gauge (5′ 6″), 14,989 miles were the meter gauge (3′ 3-3/8″), and 3,468 miles were the narrow gauge (2′ 6″ and 2′ 0″). The present mileage open to traffic is some 37,500 miles to 38,000 miles.

There are some 70 locomotive, carriage building and repair shops in India, employing about 115,000 hands. Much of the active management and supervision of the railways in India is by a Railway Board with headquarters at Simla in the spring and summer, and at Calcutta in the winter. After the completion of the new Capitol at Delhi the Railway Board's headquarters will probably be there.

The general administration of the railways is under the following departments:

1. Railway Establishments.
2. Railway Construction.
3. Railway Traffic.
4. Railway Projects.
5. Railway Stores.
6. Railway Statistics.

7. Railway Drawing Branch.
8. Railway Audit and Accounts.

Most of the purchases for Indian Railway Requirements are made in England or are supplied by the local Government shops.

Corridor trains are rare in India and the construction of first and second class carriages is the 4-berthed compartment method, which are roomy and comfortable, though not ornate. The roofs are carefully made sun-proof, and special windows of dark glass and blinds are used to lessen the sun's glare. Electric lights and fans are generally used. The use of corridor trains will probably become more general in a few years.

India's chief railways, their mileage and districts served:

Name	Indian Headquarters	Districts Served	Mileage	Gauge	
East Indian Ry.	Calcutta	Southern Punjab United Provinces Bihar Western Bengal	2,806	5.6	foot
Bengal Nagpur R. R.	Calcutta	Central Provinces (East) Bihar, Orissa Part of Madras	3,122	⅔–5.6 ⅓–2.6	foot foot
Bombay, Baroda & C. I. R. R.	Bombay	Northern Half Bombay Presidency Central India South Rajputana	997 1,827	5.6	foot meter
Bengal & Northwestern R. R.	Gorakhpur	Northern U. P. Bihar	2,053		meter
Assam-Bengal R. R.	Chittagong	Province of Assam	1,045		meter
Great Indian Peninsula	Bombay	United Provinces—Lower Central Bombay Presidency Hyderabad Central Provinces—West Central India Part of Rajputana	3,441	5.6	foot
Northwestern Ry.	Lahore	Sind Punjab Northwest Frontier Prov. Baluchistan	5,694	5.6	foot

Name	Indian Headquarters	Districts Served	Mileage	Gauge
Madras & Southern Mahratta	Madras	Madras Presidency Part of Hyderabad Part of Bombay Part of Mysore	3,171	⅔–3.3–⅜ foot ⅓–5.6 foot
Burma Railway	Rangoon	Upper and Lower Burma	1,633	3.3–⅜ foot
Nizam's State R. R.	Secunderabad	State of Hyderabad	910	½–5.6 foot ½–3.3–⅜ foot
Eastern Bengal R. R.	Calcutta	Eastern Bengal Northwestern Assam Northern Gangetic Plain	2,812	5.6 foot
Oudh & Rohilikhand R. R.	Lucknow, U. P.	Central and Eastern United Provinces	1,638	5.6 foot
Southern Indian R. R.	Trichinopoly	Whole of Southern India	1,953	⅔–3.3–⅜ foot ⅓–5.6 foot

SCHEDULE OF MINIMUM CLEARANCES FOR INDIAN RAILWAYS.*

5 ft. 6 in. Gauge.

(A) Minimum horizontal distance, from center of track to any structure, except a platform, from 1 ft. above rail level to 11 ft. 6 in. above rail level is 7 ft. 0 in.

(B) Minimum height above rail level, at center of track for over-bridges or overhead bracing out of stations is 14 ft. 6 in. On important lines is 16 ft. 6 in.

(C) Minimum height above rail level for telegraph wires crossing the line is 20 ft. 0 in.

(D) Minimum height above rail level at center, for tunnels on *single line* is 19 feet. 0 in. Width at rail level is 13 ft. 0 in. At 7 ft. 3 in. above rail level is 17 ft. 0 in.

(E) Minimum height above rail level at center for tunnel on *double line* is 20 ft. 9 in.

Minimum width at rail level is 26 ft. 6 in.

Minimum width at 6 ft. 0 in. above rail level is 29 ft. 6 in.

*Extract Circular No. 1820—R. C. Indian Railway Board.

2 ft. 6 in. Gauge.

(A) Minimum horizontal distance from center of track to any structure, except a platform, from rail level to 9 ft. 6 in. above rail level is 6 ft. 0 in.

(B) Minimum height above rail level at center of track, for over-bridge or overhead bracing out of stations is 12 ft. 6 in.

(C) Minimum height above rail level for telegraph wires crossing the line is 20 ft. 0 in.

(D) Minimum height above rail level at center, for tunnels on *single line* is 15 ft. 0 in.

Minimum width at 9 in. above rail level is 12 ft. 0 in.

Minimum width at 5 ft. 0 in. above rail level is 13 ft. 0 in.

Meter Gauge.

(A) Minimum horizontal distance, from center of track to any structure, from rail level to 1 foot above rail level is 4 ft. 5 in.

(B) Minimum horizontal distance, from center of track to any structure, except a platform, from 1 foot above rail level to 10 ft. 6 in. above rail level is 6 ft. 3 in.

On important lines is 6 ft. 10 in.

(C) Minimum height above rail level, at center of track, for over-bridges or overhead bracings out of stations is 12 ft. 6 in.

(D) Minimum height above rail for telegraph wires crossing the line is 20 ft. 0 in.

(E) Minimum height above rail level at center for tunnels on a *single line* is 19 ft. 0 in.

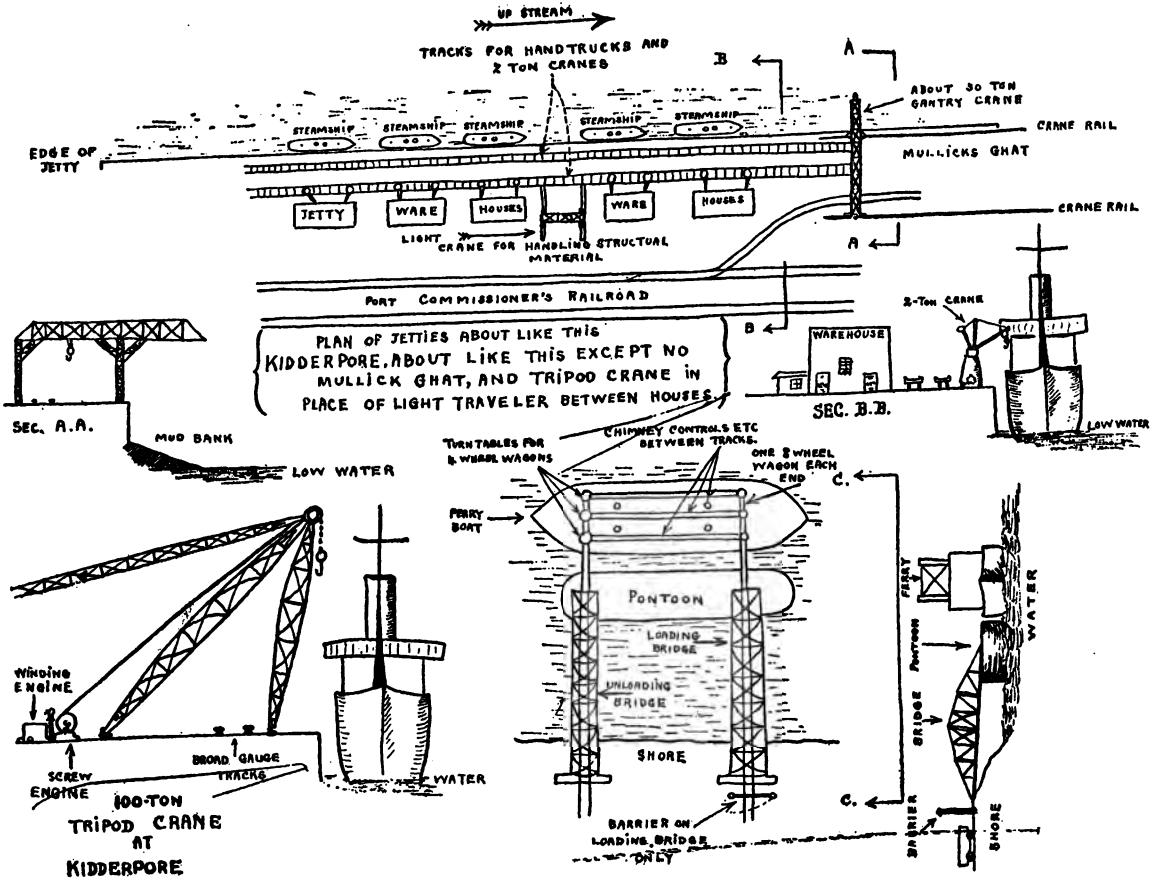
Minimum width at rail level is 13 ft. 0 in.

Minimum width at 7 ft. 3 in. above rail level is 17 ft. 0 in.

(F) Minimum height above rail level at center for tunnels on a *double line* is 20 ft. 9 in.

Minimum width at rail level is 26 ft. 6 in.

Minimum width 6 ft. 0 in. above rail level is 29 ft. 6 in.


UP STREAM
TRACKS FOR HANDTRUCKS AND 2 TON CRANES
B
A
ABOUT 30 TON GANTRY CRANE
CRANE RAIL
EDGE OF JETTY
STEAMSHIP
STEAMSHIP
STEAMSHIP
STEAMSHIP
STEAMSHIP
MULLICKS GHAT
JETTY
WARE
HOUSES
WARE
HOUSES
CRANE RAIL
LIGHT CRANE FOR HANDLING STRUCTURAL MATERIAL
PORT COMMISSIONER'S RAILROAD
PLAN OF JETTIES ABOUT LIKE THIS
KIDDERPORE, ABOUT LIKE THIS EXCEPT NO MULLICK GHAT, AND TRIPOD CRANE IN PLACE OF LIGHT TRAVELER BETWEEN HOUSES.
SEC. A.A.
MUD BANK
LOW WATER
B
WAREHOUSE
2-Ton CRANE
SEC. B.B.
LOW WATER
TURNTABLES FOR 4 WHEEL WAGONS
CHIMNEY CONTROLS ETC BETWEEN TRACKS.
ONE 8 WHEEL WAGON EACH END
C.
FERRY BOAT
PONTOON
LOADING BRIDGE
UNLOADING BRIDGE
SHORE
BARRIER ON LOADING BRIDGE ONLY
FERRY
PONTOON
BRIDGE
WATER
BARRIER
SHORE
C.
WINDING ENGINE
SCREW ENGINE
BROAD GAUGE TRACKS
WATER
100-TON TRIPOD CRANE AT KIDDERPORE

9.

COMMERCIAL CENTERS OF INDIA.

Cities	Population	Chief Industries and Trade
Calcutta	1,300,000	Chief Port and Commercial City, Rice Mills, Jute, Coal Mines and Ore Mines in Provinces and localities nearby.
Bombay	1,100,000	India's Western Gateway, Cotton, Grain, Oilseeds, Goatskins, Manganese Ore and Yarn.
Madras	600,000	Cotton, Tobacco, Skins, Drugs, Spices.
Karachi	175,000	Grain, Raw Cotton, Hides, Skins, Wheat, Barley.
Cawnpore	180,000	Leather Goods, Woolen Goods, Cotton and Tents, Flour Mills, Iron Foundries and Chemical Works.
Delhi	240,000	Native Industries, Silversmiths, Lace Works, Copper and Brass Work, Pottery and Embroidery.
Lahore	230,000	Agricultural Implements, Silk Goods, Lacquered Ware, Soap, Nitric and Sulphuric Acids and Vegetable Oils.
Lucknow	270,000	Gold and Silver Brocade, Glass Works, Perfumes, Cotton Fabrics, Railway Shops and an Educational Center.
Rangoon	300,000	Rice, Timber, Oil, Gold, Ivory and Wood Carving.

Agra	190,000	Cotton Goods, Carpets and Flour.
Benares	225,000	Holy City of India.
Amritsar	160,000	Brass Work, Ivory and Wood Carving, Cotton, Cloths and Carpets.
Jaipur	140,000	Pottery and Brass Work, Dyeing, Marble Carving, Enameling on Gold.
Allahabad	175,000	Printing.
Poona	160,000	Agriculture, Cotton, Paper and Flour Mills.
Bangalore	190,000	Carpets, Cotton, Wool and Tanneries, Manganese and Chrome Ore Mines.
Hyderabad	500,000	Agriculture, Cotton Piece Goods, Hardware.
Patna	135,000	Soap, Rose Attar, Carpets, Brocades, Boots and Shoes. Second Commercial Center of Bengal.

10.

INDUSTRIAL AND COMMERCIAL ESTABLISHMENTS IN INDIA.

(A) Commercial Establishments in Chief Seaports.

Calcutta	Bombay	Madras	Karachi	Rangoon	
20	10	16	10	15	Engineering Companies.
15	10	5	3	14	Contractors and Builders.
*10	1	1	0	2	Shipbuilding Firms.
15	17	19	5	3	Hardware Dealers.
27	30	25	20	5	Motor Car and Accessory Dealers.
10	9	5	5	3	Leather Goods Dealers.
12	8	2	3	2	Jewelers, Clock and Watch Dealers.
15	25	5	2	3	Electrical Stores.
10	6	3	1	2	Rope and Canvas Dealers
8	7	1	1	1	Rubber Merchants.
12	15	3	2	4	Stationers.
15	7	3	0	0	Timber Dealers.
12	6	20	10	0	Exporters of Hides and Skins.
2	7	0	0	0	Dealers in Dyes and Dyestuffs.
7	25	8	6	4	Dealers in Paints and Varnishes.
6	5	8	2	3	Dealers in Agricultural Machinery.

*Bengal.

(In almost all cases there are many more firms, though of comparatively small size and financial means.)

Other than those mentioned there are also 15 importers of Mining Machinery and Supplies in Burma, 10 principal mines and mining companies, 12 oil well companies, 18 sawmill and lumber firms and 8 importers of Iron and Steel.

NOTE.—Exporters should note that the town of Karacki is commercially of considerable importance in relation to trade with Afghanistan and Baluchistan, for which this and Peshawar in a lesser degree—is the natural outlet and inlet.

(B) INDUSTRIAL ESTABLISHMENTS IN INDIA.

Coal Mines; some 400.....(Companies)	150
Tea Companies	118
Railway, Tramway and Steamship Transit Companies,	75
Iron and Steel Works.....	2
Sawmills	125
Sugar Factories	40
Shipbuilders	18
Ice Factories	50
Match Factories	10
Chemical Works	36
Dairies	75
Jute Mills	75
Cotton Mills	275
Cotton Ginning and Pressing Factories.....	1,600
Railway and Tramway Workshops.....	95
Rice Mills	550
Tanneries	335
Paper Mills	8
Stone Works	45
Woolen Mills	20
Tobacco Factories	14
Rubber Works	59
Petroleum Refineries	7
Kerosene Tinning Works	20
Jute Presses	125
Engineering Workshops	161

Printing Presses	145
Electric Light Plants	30
Tile and Brick Factories	182
Dockyards and Port Trust Works	15
Ammunition Plants	17
With some 500 others employing about 1¼ million employees	500

(C) *General Distribution of Factories.

Cotton and Gin Presses mostly in Central Provinces and Bombay.

Cotton Mills mostly in Bombay, Madras and Central Provinces.

Jute Mills and Presses and Silk Filatures in Bengal.

Flour Mills in United Provinces and Punjab.

Sugar Factories in United Provinces.

Rice Mills, Sawmills and Petroleum Refineries mostly in Burma.

Iron and Brass Foundries in Bengal and Bombay.

(D) Types of Industries Financed and Run by Europeans and Natives.

Those almost exclusively under European capital are:

Railways.
Tramways and Light Railways Registered in India.
Jute Mills.
Gold Mines.
Woolen Mills.
Paper Mills.
Breweries.

Those largely under European capital are:

Coal Mines.
Petroleum Refineries.
Tea Plantations.
Banks.
Rice Husking Mills.

*Sarkar, 4th Edition.

Saw and Timber Mills.
Flour Mills.
Sugar Factories.
Iron and Brass Foundries.
Indigo Factories.

Those mainly financed by European capital are:

Cotton Mills.
Ice Factories.
Cotton Gins and Presses.
Jute Presses.
Printing Presses.

11.

THE INDIAN COMMODITY MARKET: DEMAND AND COMPETITION.

(A) Commodities India Must Buy in Order of Importance.

Textile Cotton—Piece Goods.
Machinery and Typewriters.
Sugar.
Metals.
Railway Plant and Rolling Stock.
Instruments and Electrical Equipment.
Hardware and Agricultural Implements and Motor Cars and Cycles.
Oils—excluding Kerosene.
Salt.
Liquors, including Perfumed Spirits.
Building and Engineering Materials and Belting.
Glass and Glassware.
Kerosene Oil.
Spices.
Paper and Pasteboard.
Chemicals and Chemical Preparations.
Drugs and Medicines.

Besides these come Cement, Jewelry, Umbrellas, Earthenware, Rubber Goods, Condensed Milk, etc., all in considerable volume.

(B) Consumer Demand.

American and European Colony, Merchants, Military Men, Civil Employees, Indian Princes and Nobility, Indian large Land Owners, Indian Merchants, Government and State Railway Contractors, Factories and Port Improvement Works.

These consumers patronize the large department stores and import houses, and purchase, for the most part, the same type of articles, as a corresponding community in this country would buy.

The native population, with a very small purchasing power per capita, require commodities within their means and deal almost entirely through the Bazaars, where cheapness and gaudiness are of far greater importance than quality. American manufacturers will find, however, that once their article has become popular with the great native population, the sales and collective profits will be enormous.

*(C) Competition Met in Each Class of Goods.

Motor Cars and Motor Cycles.

American medium-priced and cheap cars have obtained a footing more or less permanent. There should be an excellent demand in India at all times for pleasure cars, motor trucks, parts and accessories. The preference among both Europeans and Indians is for the British make of fair and medium-priced cars; at all times a splendid opening for a car priced from $800 to $1,200. Spare parts should be stocked by dealers. They frequently carry from $50,000 to $100,000 worth of parts in stock in Calcutta at one time. Agents should not be appointed for too large a territory. Main depots can cover as follows:

Calcutta—Bengal, Bihar, Orissa, Assam, Burma.

Bombay—Bombay Presidency, Karachi, Sind, Nagpur and Central Provinces.

Madras—Madras Presidency, Native States of Southern India.

Lahore—Punjab, United Provinces, Northwestern Frontier Provinces, Rajputana.

In addition to these four main depots it would be well to appoint agents in Cawnpore, Rawalpindi, Delhi, Bangalore, Rangoon, Secunderabad, etc.; this, provided the manufacturer

*Condensed from Thomas Ainscough's Report—1919.

is not absolutely satisfied of the ability of the main agents to cover these other centers.

Provisions.

Most of this business is done by powerful merchant importers at chief seaports, who act as caterers to the railways, hotels and clubs and army messes; supply retail to European communities and wholesale to Bazaar trade for Indian consumption. The chief competitors, by articles, are as follows:

Ham and Bacon—United Kingdom, 1st; United States, 2nd, 11%.

Butter and Cheese—Denmark and Austria (somewhat, Holland, Germany, Belgium and Italy); United States, 2nd.

Jams and Jellies—United Kingdom; United States, practically none.

Biscuits and Cakes—United Kingdom, Australia and Japan; United States, practically none.

Cocoa and Chocolate—United States, Holland and United Kingdom.

Patent Foods—United Kingdom, United States.

Canned and Bottled Goods—United Kingdom, Australia and United States.

Condensed and Preserved Milk—United States, United Kingdom, Australia.

Pickles, Sauces and Condiments—United Kingdom, Australia, United States, Japan.

Chemicals and Chemical Preparations.

In general, this business is in the hands of import merchants. There is good business done in soda ash, crystals and caustic soda, largely for use in paper mills, glass factories and dyehouses. The competition is as follows:

Acids, Sulphuric—Sicily, Japan, United States, practically none.

Bleaching Materials—Japan, United Kingdom, United States, practically none.

Soda Compounds—United Kingdom, Japan, United States, practically none.

Sulphur—Japan, 95%; United States, practically none.

Carbide of Calcium—Previously Germany, United Kingdom, Japan, United States, practically none.

Potassium Compounds—United Kingdom, United States, Japan.

Disinfectants—United Kingdom, Japan.

In all, the United States supplies a total of 11% of chemicals imported into India.

Drugs and Medicines.

The United States holds a good third place in this trade and ships largely patent medicines, quinine salts and miscellaneous drugs. Japan, in second place, supplies mostly camphor and some patent medicines of a very inferior grade. The United Kingdom, in first place, provides most of the quinine salts, patent medicines and chemical requirements. The greater part of this trade is in the hands of the wholesale European druggists and chemists. Import firms will also take agencies for this line. The largest trade, however, is handled by native import houses, purchasing direct and catering to the Bazaar trade. Manufacturers should establish their own depots and advertise largely, with traveling salesmen supporting the advertising program. A large mail order business could be worked up by using the Indian Post Office system of Value Payable Post.

Dyeing and Tanning Substances.

Prior to the war, this trade was largely done with Germany. It is almost essential in this business to open offices and laboratories in Bombay, preferably Bombay, due to the availability of more trained chemists and demonstrators. Having established the central office, sub-depots throughout India should be established. In cases where firms are too small to undertake this expense, American or British import firms of good standing should be appointed; even native firms, if as-

sured of their standing. The chief competition is with the United Kingdom at present. The United States holds strong second place.

Alizarine Dyes—United Kingdom, United States.

Aniline Dyes—United Kingdom, United States and Japan.

Synthetic Dyes—United Kingdom, United States and Japan.

NOTE—Japanese Dyes do not seem to have great strength of color, and their success has not been great.

PAINTS AND PAINTERS' MATERIALS.

India is a large and important foreign field for the sale of paints and painters' materials. There are some local plants manufacturing paint; but of a very inferior quality. India produces great quantities of linseed oil and turpentine and, if properly managed by Europeans, a good local plant would offer vast opportunities. The present situation and chief competition is as follows:

Red and White Lead—United Kingdom, Japan, United States.

Turpentine—United Kingdom, United States.

Other Painters' Materials—United Kingdom, United States, Japan.

SOAP.

This trade is almost exclusively in the hands of the British and some local plants. Japan affords, after the United Kingdom, probably the most serious competitor, chiefly in cheap toilet soaps, floating soaps and, to some extent, in household soaps. India offers a splendid opportunity for local industrial development in this line. All raw products are near at hand in fresh and sufficient quantities, with the exception of caustic alkalis, which must be imported. Land rents or purchase of land is quite low, as is taxation. The market for the goods is directly at hand. The difficulties, however, are with labour and the manufacturing of boxes and cartons, and the absence of cheap substitutes for tallow.

Apparel.

This trade is very important and is mostly handled by the European retail houses, who carry high grade articles and cater to the European community; following this trade, in importance, come the Bazaar wholesale and retail merchants catering to the Indian population, and carrying a cheaper grade of merchandise. Much of this business is done by seasonal visits from travelling salesmen. The competition, largely, is as follows:

Drapers' Goods and Uniforms—United Kingdom and Japan; United States, practically none.

Gold and Silver Thread—France (exclusively).

Hats, Caps, Bonnets—United Kingdom, Italy and Japan. (Italy and Japan, mostly cheaper grade goods.)

Hosiery (silk)—Japan—almost exclusively.

Hosiery (cotton)—United Kingdom and Japan; United States, 1.9%.

Haberdashery and Millinery—United Kingdom, Japan.

Boots and Shoes (Leather)—United Kingdom, Japan, United States, and local.

Boots and Shoes—United Kingdom, Sweden, Japan, United States, practically none.

Leather (Excluding Belting).

This trade is practically controlled locally and by the United Kingdom. Indian army requirements are manufactured at Cawnpore, and high grade saddles are bought chiefly from the United Kingdom and Australia. In fancy leather articles the United Kingdom holds first place; United States second; and Japan, third.

Leather Belting for Machinery.

Local attempts to manufacture belting have not proved successful. The United Kingdom holds first place; the United States, second place, and Japan, a close third. This business

is constantly growing with the recent industrial boom and, with proper introduction and a sales campaign, a very good demand should result. At present, the British belt is thought to be more durable and in some cases more efficient. This prejudice, no doubt, can be overcome.

Tobacco.

The British Empire and United Kingdom supply a large percentage of this trade. Holland and the Philippines are the chief suppliers of cigars. The demand is mainly for cheap cigarettes. Well organized English companies keep this trade in the hands of the British. Chief competition would be the Imperial Tobacco Company, which has branches all over India.

Rubber Manufacturers.

This trade consists chiefly of motor tire shoes and tubes, followed by other types of tubing, toys, surgical appliances and toilet requisites. The United Kingdom holds first place; with Japan, second, and the United States, third, with about 3% of the total trade.

Instruments.

Electrical Apparatus and Appliances.

This trade is the most important of all instruments and similar equipment, and is roughly divided as follows: Japan heads the list and supplies largely electric lamps, wires and accessories. The United Kingdom comes next, supplying a general line, and the United States is third, with about 17% of the trade, mostly in fans and general accessories. Itemized, the most popular brands are as follows:

Lamps and Parts—Philips' Dutch Lamps, first; Japanese, second.

Fans and Parts—American, first; Italian, second; United Kingdom, third.

Electric Wire and Cables—United Kingdom, first; Japan, second.

Musical Instruments—United Kingdom, first; United States, second; France, third; Japan, fourth.

Optical Instruments—United States, first; United Kingdom, second; Japan, third.

Photographic Appliances—British, first; United States, second.

Surgical Instruments—United Kingdom, first; United States, second; Japan, third.

Earthenware and Porcelain.

English and local goods predominate. Japan comes second, supplying mostly the Bazaar trade.

Glass and Glassware.

Glass is a very important item of India's trade; the greater part of which consists in bangles, beads and imitation trinkets. Local manufacture supplies about one-third of the demand. Other sources of supply are France, Italy and Japan. In other articles such as tableware, sheet and plate glass, bottles and lampware the trade is, generally speaking: United Kingdom, first; Japan, second; Continental countries, third.

Cement.

Local manufacture of this material is in a strong position and forms the main competition for any foreign brand. British cement is the most popular, but local brands are continually becoming more so. There is a tremendous future for this trade. Local plants will probably more and more retain this trade in their own hands.

Hardware.

This trade, next to *machinery,* has one of the brightest futures. Primarily, there is little to no local competition at present, and with the growing industrial boom in India the demand is constantly increasing. The United Kingdom comes

first in this trade with the United States second and Japan third. This trade comprises, roughly, agricultural instruments, iron and tin buckets, implements and tools, metal lamps, locks, bolts, nuts and enameled ironware. The agricultural trade is best done through the Agricultural Farms Implements Depots established throughout India, and they should be induced to carry stock. The other trade is chiefly done through the wholesale and retail houses with branches established throughout India. Smaller and cheaper articles are dealt with through the Bazaar.

Machinery.

This trade holds out the biggest future, in many respects, of all other commodities, and includes the following: Electrical machinery, machine tools, sewing machines, typewriters, boilers, mining machinery, paper mill machinery, rice milling plants, pumping machinery and water works, sugar plant machinery, sawmill and woodworking machinery, flour mill machinery and textile machinery. Too careful attention and fostering of this trade cannot be given, and the initial expense or continual overhead of having efficient men constantly on the field should not be considered. Service stations, with a small but efficient staff, should be established in two or three of the chief industrial centers and economical and proper erection of plants should always be assured. Careful installation of all machinery should be a paramount practice.

At the present time many buyers, particularly Parsee and Indian, are earnestly looking for American goods. America's trade is continually growing, in spite of the practice of placing many Government and private contracts with London firms. A very careful study of the conditions and requirements of the country must be made. America's greatest opportunity at present in the machinery trade of India lies in the following: Hydro-electric plants, machine tools, oil crushing and oil refining machinery, flour mill machinery, sewing machines and typewriters. General competition in these articles is with England and Japan.

Railway Rolling Stocks and Plants.

Most of this equipment is manufactured in the Government Railway shops in India or supplied by the United Kingdom. No doubt, in time, the United States will gain a foothold in this trade, but the development will necessarily be slow and will take much patience and the expenditure of considerable money.

(D) A Note on German and Japanese Competition.

1. In referring to competition of various articles, no mention has been made of the Central Powers, such as Germany, Austria, etc. No sound opinion can be formed on the competition from these countries until their finances and trade become more stable. No doubt they will be a factor to be carefully considered in a few years; but at present they need not generally be feared.

2. In mentioning Japanese competition it would be well to realize the very strong foothold she has obtained in Indian trade. It would be well also to remember in general that she is supplying for the most part inferior goods to a poorer purchasing class, at a cheaper price. In most articles the quality and workmanship cannot be compared to that of British or American manufacture.

3. America has successfully competed with Japan and Great Britain in articles in which formerly Great Britain had the monopoly and by careful attention to the buyers' need, good advertising and constant effort should continue to increase her trade enormously.

12.

SUGGESTIONS
for
PROMOTION OF TRADE.

(A) HOME CONSIDERATION AND PREPARATION.

1. Primarily, a careful study of the market must be made. This should include geography, climate and seasons, the people and their customs, their institutions, commerce, finance, foreign competition, resources and expenses of operation.

2. Next must be considered the various mediums of reaching the market, i. e.: travelling salesmen, permanent resident representation, branch offices, European or native agency houses established in India, export establishments, association of manufacturers pooling expenses and export managers, etc.

3. It must be decided to enter the Indian market permanently.

4. Manufacturers and merchants must be prepared to lay out a considerable amount of money annually for such exploitation.

5. Satisfactory returns must not be looked for before two or three years, though results should begin to be felt after 18 months.

6. The home office must be carefully organized and efficiently run, to handle the business when it comes in.

7. Personal contact and interest must be shown whenever and as often as possible.

8. The minutest attention to detail must at all times be exercised and manufacturers or merchants must prepare to send to India what India wants.

9. If direct contact is to be established a suitable branch office must be rented in a desirable quarter of one of the chief ports or commercial centers; preferably in Calcutta or Bombay, for general sales promotion.

(B) CHOOSING A REPRESENTATIVE.

1. A representative sent out from this country to India should be a gentleman from 25 to 45 years of age. He must have great adaptability, good address and a fine personality. He must be a man of good education and broad liberal views. He should have good health, good habits and a general knowledge of the country and the people he is to approach. He must not be a commission hunter.

2. He should arrive in India well introduced and be prepared to make his life and interests common with those of the people among whom he is to foster trade. He should belong to their town and country clubs, and should entertain considerably. Above all, he must keep up his social, financial and commercial standing among his friends and business associates.

3. Whenever possible, he should endeavor to pick up as much of the language predominant in the country as he is able.

4. The representative should be well versed in the product or article he is selling; should have a love and instinct for foreign trade and a general knowledge of credits and banking terms.

(C) DEPARTURE.

1. The representative should leave this country fully equipped with literature covering his complete line, and should be backed by an advertising campaign suitable for the country. He should have a clear and thorough cable code for his entire line, proper financial support carefully arranged for, during residence in India, suitable letters of introduction,

credentials and customers' lists, definite instructions regarding prices and selling terms, authority to act for his firm in cases of default of drafts, etc., and a true financial statement of the firm he is representing.

2. Suitable clothes and traveling necessities might better be purchased after his arrival in India, and far more cheaply. (See General Useful Information, Chapter 14.)

(D) TIME FOR DEPARTURE AND ROUTES OF APPROACH.

1. The best season in India for business is from October to February, when the days are cool and generally healthful conditions prevail. By then, the people know the result of the monsoon and are better able to estimate their requirements.

2. The American representative has a choice of several routes for his trip to India, namely:

Direct from New York through Mediterranean and Red Seas via Aden to Karachi, Bombay, Colombo and Calcutta.

From Seattle to Hongkong via Japan, to Singapore, etc.

From San Francisco to Calcutta via Manila, etc.

From New York to London, to India via Pacific & Orient sailings.

Boats from the West Coast of America to the Chinese Coast take about three weeks from point of departure to point of transshipment for Calcutta.

(E) TERMS OF SALE, CREDIT RISKS, BANKS.

1. During the war the United States was able to get a large volume of Indian trade on its own terms, prices and delivery; primarily due to the inability of foreign countries to supply manufactured articles, and, secondly, because the exchange greatly favored the rupee. Now, however, things have changed. Continental competition and low prices are beginning to appear; the exchange is against India and long terms are being offered to get the business. If this competition is to be satisfactorily met, America, as a nation, and

American banking institutions must organize to back the individual pioneers who are trying to promote the sale of American goods in foreign markets. No longer can individual merchants and manufacturers be expected to compete favorably against foreign countries, well organized for this trade, whose large associations and institutions are all helping to retain their old volume of trade in foreign fields. The finances of our country must be placed more at the service of our merchants.

The following conditions regarding terms of sale and quotations should be carefully regarded in order to reap a satisfactory result from Indian trade.

2. Cheapness and appearance are far more important in the Indian market than quality and lasting powers. This is chiefly due to the low standards of living and small incomes, though the country itself has great natural wealth.

3. Next to cheapness and appearance (which apply generally to the native trade, not to the European community and industrial institutions) are the terms of sale. The Bazaar dealer usually requires or demands 60, 90 or 120 D/S, documents D. A. (documents against acceptance); D. A. should not be allowed native firms. They are, as a rule, not very punctual in making payments; but will generally be willing to pay even a higher rate of interest than the bank rate, on overdue drafts. All payments should be made promptly, and American firms should insist on this point. It is quite a usual custom to allow a deduction of interest at the ordinary bank rate prevailing for any days remaining unexpired, when payment is made.

The wholesale houses and large European importers generally expect 30 to 60 D/S, D. P. or D. A., and consider it a matter of honor to meet draft at maturity. These houses are very good customers and thoroughly reliable. In cases where they cannot meet the draft at maturity, they generally advise the seller and ask for an extension of time.

No great quantity of business can be done on the basis of funds in New York with order, or on the straight irrevocable letter of credit basis; though it should be used in cases

of sudden market stagnation and a severe unforeseen drop in exchange. For in such times the less responsible houses are apt to default on payments or ask for long extensions.

In dealing with the native of small financial or moral responsibility, it is generally well to use the services of a Banian or a Schroff, who undertakes the Bazaar risk, guaranteeing the importer against loss. His acceptance of the draft against the bill of lading is provided for by the importing firm before they decide to execute or accept the order. His usual charge is 1% to 2% of the amount of the draft. As these Schroffs operate through the banks and are not employed by individuals, it is impossible to get in touch with them by correspondence.

Frequently in dealing with Bazaar customers, an agent is appointed as the "in case of need," and drafts are drawn accordingly, with such instructions.

On all documents not honored at maturity a protest should be requested, for this formality is often indispensable in proving non-payment.

Interest and collection charges covering all documents for India are always for the account of the customer.

The interest on drafts drawn on Indian buyers has in the past few years usually varied from 6% to 8%.

(F) METHODS OF SALES.

The usual method of reaching the consumer in India, without direct representation, is to appoint a firm in Bombay, Calcutta and Madras as an agent for one's goods. These central agencies are generally allowed the exclusive selling rights for a territory about the area of the Bombay or Madras Presidencies. These central agents then send out their salesmen through this territory and book orders, appointing in certain smaller industrial and commercial centers, sub-agents, who canvass a local territory allotted them by the central agent. All the agents and salesmen, from the big importer down, work on a commission basis (plus salary for the salesmen). Any American firm, therefore, who has a saleable article for which there is a large and steady demand, would

do well to establish their own branch office and employ native salesmen. This method would require a considerable outlay of money; but would eliminate the big importers' profit and quite possibly another intermediary profit and, in the long run, should well repay the initial cost.

Banks and Banking Institutions.

There are some twenty first-class banking houses and banks in India, with branches in most of the commercial centers throughout the interior. These banks render valuable services to the foreign merchant and traveler as well as to local firms and individuals of the country. A large majority of the influential banks in India have agents in New York and other cities throughout the United States. These banks and their agents attend to the discounting, forwarding and collections on foreign bills, the purchasing of exchange, the issuing of acceptance and bankers' acceptance credits, and advising of credits which have been established in the exporters' favor by foreign buyers.

In India especially the banks are of great assistance in advising credit standing of prospective customers (one must be a depositor of the bank to get the best information). They frequently render valuable service in the disposal of unaccepted merchandise, and in the details of incoming shipments. They will always be found courteous and willing, particularly providing the enquirer is a good customer and has a deposit with them.

It is to be hoped that shortly more American banks will open branches in India and make a careful study of the country in order to be in a position to help American Trade gain a firmer foothold.

(G) QUOTATIONS TO INDIA AND THEIR MEANINGS.

Buyers in India desire, whenever possible, to be quoted C. I. F. (cost, insurance and freight) Bombay, Calcutta, Karachi or Madras; namely, the chief ports of call. There are many times, particularly so, when business is slack, that American firms could get orders if it were possible for them to quote out-ports or small coastal ports such as Cochin, Cali-

cut, Marmagao, etc.; but, due to the rulings of the Conference Lines (a sort of consortium or association of English shippers operating lines to India and coastal lines), it has been impossible to do so. Shipments to certain outports, at certain times, frequently mean a great saving of time and inland freight to the customers.

It might be well at this time to define, as the English understand them, certain shipping quotations and abbreviations:

F. O. B.—Free on board vessel at port of departure.

F. O. R.—Free on rails (add city or port).

F. A. S.—Free alongside vessel or wharf. (Foreigners sometimes understand it to mean free aboard vessel.)

C. I. F.—Cost, insurance and freight (shipper pays all expenses from factory to port named on bill of lading).

W. A. P.—With particular average. (Usually 3% to 5% that must be suffered before a claim is allowed.)

C. & F.—Same as C. I. F., except seller does not insure.

C. I. F. & E.—Cost, insurance and freight and exchange for the account of the shipper. (Practically never employed in India.)

C. I. F. C. I.—Cost, insurance, freight, collection charges and interest. Exchange for the account of the customer; this is a very favored quotation in India and not difficult to figure.

(H) *DOCUMENTS.

There are no consular documents of any kind required. The usual set of documents forwarded to a bank covering a shipment to India, includes the following:

A 30, 60 or 90 days' sight draft drawn on the customer (in duplicate) to the order of the exporter and endorsed by him. (Amount of draft to cover total cost of merchandise C. I. F., providing insurance is arranged for by shipper.)

*All documents requiring signature should be signed by one having the authority to use the firm or company name, in order to show the foreign customer he is getting personal attention from the executives of the house.

Bills of Lading (original, duplicate and triplicate; negotiable or signed).

Insurance certificates (original, duplicate and triplicate).

Invoice, original (duplicate and triplicate if desired).

Letter of Instruction to bank covering all papers.

The Tariff Duty in India is an ad valorem duty with values usually fixed.

(I) METHODS OF RECEIVING PAYMENTS IN UNITED STATES.

Sight Drafts.

1. Sight drafts of 30, 60, 90 and 120 days are forwarded with complete set of documents to the shipper's bank in the United States. The bank discounts these bills at their full face value and pays the shipper the total amount of the draft. These bills are discounted with recourse to the shipper. Interest at the usual rate current for India and collection charges are for the account of the customer. The documents are then forwarded to the bank's branch in India or their correspondents and then are presented to the customer. According to the shipper's instructions, the documents are surrendered against acceptance or payment of the draft, as the case may be. Should the documents be honored at maturity the transaction is closed *financially* as far as the shipper is concerned. Should, however, the documents be defaulted at maturity, the bank will have recourse to the shipper, who must immediately reimburse them for the full amount. In such cases the shipper should have the draft protested and, if necessary, extend usance 30 days with interest with which to straighten the matter out. If still the draft is unpaid the matter should be taken up with the local Chamber of Commerce nearest the customer in India. When, and if, eventually, the money is collected, the bank in India returns same to the shipper in the United States.

Banks' Acceptance Credits.

2. This is a credit issued in favor of a merchant in the United States by his bank in the United States generally over

a period of time for a stipulated amount or up to a stipulated amount during the period agreed upon. Documents and drafts to the amount of the shipment are drawn on the customer as in case (1) and forwarded together with the draft of acceptance drawn on the shipper's bank at sight (against the acceptance credit already opened). The bank then accepts acceptance draft, stamps and returns it to the shipper, who then discounts it in the open market at a rate usually varying from 4% to 6%. The documents and draft on the customer go through as in case (1) with recourse. In cases of non-payment the same action is taken as in case (1). The interest lost in the sale or discounting of the draft in the market, on all big orders, should be figured in the price of the goods when quoting the customer in India. Acceptance credits are obtained for a rate of about ⅛ of 1% for 30 days. The discount rate depends largely on the value of the paper, or, in other words, how reliable the acceptance is.

Partial Deposit.

3. Another method of selling and financing a shipment to India is as follows: Require the customer to deposit to the shipper's order in the shipper's New York bank or the shipper's branch in India, a certain proportion of the total value of the order, say 50% or 75%; even 25% will very often prove a valuable safeguard. This deposit should be made at the time of placing the order and remain in the bank until the goods leave the port of departure. A 30, 60 or 90-day sight draft should then be drawn on the customer for the balance of the value of his goods, and the money deposited at the time of placing the order should then be forwarded by the bank to the shipper. All details of papers, etc., to go through as in Case (1) or Case (2).

Refund Interest.

4. To make Case (3) more attractive to the buyer, the seller can refund to the buyer the interest drawn on the American or Indian bank, on the deposit made by the buyer to the shipper, at the time of placing his order.

Full Deposit of Cash.

5. This method is similar in every way to Case (3) except that the buyer at the time of placing his order deposits to the seller's account the full value of the order. Such deposit can be made in either the seller's branch bank in India or at the seller's bank in the United States. Upon notification by the bank and presentation of the documents to the customer in India, the money should be immediately remitted to the seller in the United States. The interest drawn on the deposit can then be refunded to the customer, less the cost of the cable transfer of funds. Exchange in Case (2) and Cases (3), (4) and (5) should be for the account of the customer.

Irrevocable Credits.

6. By this method the customer in India, through his bank, opens in the branch bank in the United States an irrevocable letter of credit in favor of the seller. This letter of credit is usually drawn for the full amount of the merchandise C. I. F. India. It usually stipulates a date of delivery by the clause "not later than" such and such a date, or states "during the month of ————." It also advises what insurance is to be covered and what documents must be presented to the bank. Upon completion of the documents a draft is drawn on the bank, issuing the credit, for the full value of the shipment C. I. F. On such a draft the bank is usually advised as follows: "Drawn against your Irrevocable Credit No. ——, your advice of such and such a date." There is no recourse to the shipper after the bank has paid him; other than a moral responsibility for the quality and packing of his goods and for his compliance with the terms of sale.

Note.—Letters of credit are generally opened for bank customers at a rate of ⅛% to ¼% for 30 days. This should be an absolutely safe method of doing business, though in 1920 I believe there were isolated cases where injunctions were declared against such credits after advice to the seller that the credit had been opened. As a matter of fact, the letter of credit method is a poor way to get business in any volume over a long period of years, as it advertises a lack of faith.

13.

EXPENSES OF ESTABLISHING AN OFFICE IN CALCUTTA.

Office space in the principal trading centres of India is in considerable demand and, consequently, quite costly. Calcutta generally receives the highest prices for rent and various other rates, as it is the chief commercial centre in India. Most prices of articles or rates in this pamphlet, given as affecting Calcutta or Bengal, can be graded down as applying to other cities approximately as follows: in proportion from high to low: Bombay, Madras, Karachi, Rangoon and up-country or inland cities; but in order to make this pamphlet conveniently short, merely a general basis on which to work is given.

(A) Office Space, Rents, Salaries, etc.

Office rent in a suitable locality in Calcutta costs about $3.50 to $4.00 per square foot per annum. In Bombay, in old office buildings, rent is about $1.50 per square foot per annum; in new buildings, $2.50 to $3.00 per square foot per annum, and so on down, according to the city and location. The salaries of office employees vary very largely and can only be roughly stated. For the less efficient and poorer type of employee the salary ranges from 50 to 75 rupees per month; for the better and more intelligent type of employee, it ranges from 75 to 150 rupees per month. Native salesmen work largely on a commission basis of 2½% plus $75 to $100 per month. They usually travel second-class. The salaries are all according to a man's efficiency and the importance of the work to be done. To run a first-class branch office in Cal-

cutta, exclusive of executives' salaries, the cost could be estimated and itemized approximately as follows:

Employees' payroll, for staff of about 10 employees..	$15,000
Traveling expenses of executives (to consist of considerable traveling at all times).....	15,000
Entertainment and advertising, office rent, stationery and cables .....$18,000 to	20,000
Contingencies or Reserve Fund.....	15,000

The estimate above given would be the type of selling organization representing, let us say, an association of reliable and old established manufacturing concerns, which had pooled the expenses of running such an organization; these firms should not be competing, but should be manufacturers of kindred articles and number about 10 to 12 in all.

A firm operating its own branch office with one resident representative sent out from the Home Office and employing only two or three native assistants to the representative, could, of course, be conducted far more cheaply. A fair estimate for this type of representation would be from $20,000 to $30,000 per annum, exclusive of executive's salary.

These estimates to the general reader will undoubtedly seem unnecessarily high, but in the Orient where entertainment figures so largely, where distances are so great, where one advertising medium would only reach but a portion of the population and at such a great distance from the home office, it is necessary to be prepared to make initially quite a considerable outlay of money. If properly introduced, represented, and well advertised, the American manufacturer should find in India a market for his goods, which should amply repay after a year or two, his decision seriously to enter the market.

Representation of one's wares in India can, of course, be done on a far less expensive scale, though with probably a corresponding proportion of sales volume, and a far less permanent foothold and reputation in the country.

(B) ADVERTISING IN INDIA.

For the most part, newspaper and other mediums of advertising should be of an appealing and attractive nature, but at all times dignified. A careful study of the religions, customs and superstitions of the people should be made; for, by ignorance of these facts, some caste might be offended, and the demand for the goods permanently destroyed.

Inasmuch as comparatively few of the village population in India read newspapers, and as such publications would necessarily vary in different provinces and districts, indiscriminate newspaper advertising would prove wasteful. Plenty of literature should always follow a campaign in the newspapers. Advertising rates are comparatively high; but if the advertisements reach the population for whom they are destined, the results are very good. Simple pictorial advertising will always prove effective. Among other media most commonly used can be listed: Mirrors, paperweights, postage stamp books, fans and umbrellas. Window displays are receiving more attention, and, together with novelty electrical signs, are proving an attractive drawing card.

The Motion Picture is one of the leading methods at the present time and is quite reasonable as regards cost.

The general rates for newspaper advertising in the best English printed papers in India are 70c per inch for 12 insertions of ordinary trade announcements, graded down to 35c per inch for 104 insertions—25% extra for special positions—and about 50% for positions next to editorial matter.

(C) PACKING AND MARKING OF MERCHANDISE.

In all shipments to India one of the chief considerations is that of proper packing. The climate is such at almost all seasons of the year, either in India or enroute, that unless goods are properly and carefully packed, upon arrival they may prove useless and will not be accepted, which entails much time, trouble, loss of money, and is ruinous to the name of the manufacturer and reputation of his goods. The most destructive conditions and elements met with are as follows:

Dampness of the sea air on the voyage.

Excessive moisture in the Tropics.

Sweating in the hold of the ship in the Arabian Sea, Indian Ocean and the Bay of Bengal.

Exposure to sun and rain on the wharves.

Mildew, white ants and fungoid growths.

The importance of these attacks on cargoes during transit and after arrival at the ports cannot be too strongly impressed on the shipper. An effective protection, frequently employed by shippers who know and have made a study of the conditions, is to pack goods in zinc or tin-lined cases with waterproof lining. Usually this method is employed only at the request of the buyers, and the additional cost is charged to them.

14.

USEFUL INFORMATION FOR THE COMMERCIAL REPRESENTATIVE.

In supplying the following general information, much of which includes expenses, rates for public service, clothes, etc., it must be taken into consideration that these are subject to change from time to time. Most of the rates and expenses are based on Bengal and Calcutta figures and would correspondingly decrease in proportion for other localities. However, for figuring estimates, etc., any slight change from these figures which may have taken place in the last six months, would not be of sufficient magnitude to alter seriously a rough estimate.

(A) *CLOTHES FOR INDIA.

MEN. A good cork sun helmet, protecting the temples and the base of the skull.

Enroute via Red Sea and Arabian Sea, thin clothes are needed—tweed or flannel.

For Northern India, clothes are required similar to autumn weight in this country, and, in addition, warm winter wraps, a light overcoat suitable for riding, and a heavy ulster, as well as riding breeches, coat and boots. In this section one should dress so as to be warm in the early morning and, as the heat increases, be able to take off garments without entirely changing.

In the south of the Indian Peninsula and in Bombay and Calcutta, cool linen suits, khaki riding and shooting suits are used.

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*(Can be easily and more cheaply purchased in India.)

Linen clothes and underclothing for at least three weeks, should be provided, due to irregularity and uncertainty of laundries.

Soft cheviot shirts and collars, or thin flannel, are needed for day.

A straw or felt hat for cooler hours of the day is necessary.

A thin dinner jacket (Tuxedo) and a full dress suit are required.

WOMEN. Thin shirtwaists and skirts of Tussore silk, or similar material, have been found suitable.

A sun helmet, similar to a man's, is necessary.

Riding and shooting suits of khaki are necessary.

For Northern India and cooler climates a warm jacket or shawl, a loose warm cloak, a light dust cloak and several evening dresses are required.

A straw or similar hat for the cooler hours of the morning and evening are desirable.

Large sun helmets, if going on shooting expeditions, are essential.

Enroute by steamer to India it is essential to take sufficient linen and under linen in the cabin for most of the voyage. Cabin luggage is necessarily limited, therefore, packing should be planned carefully. A bag with a lock, for soiled linen, should be taken. Better facilities for obtaining luggage from the hold have recently been arranged, therefore, it is not necessary to take as much in the cabin as formerly.

(B) RAILWAY TRAVELING.

BEDDING. One's bedding roll must be taken on all trips, even when visiting friends.

A bedding roll should consist, at the minimum, of a pillow, two cotton wadded quilts, one to sleep on, the other, slightly larger, as a cover. These can be substituted by an eiderdown or a pair of good warm blankets. In addition there should be a pillow case, sheets and a light blanket. A

waterproof roll for wrapping the bedding in, must be taken. Two or three towels, soap, toilet articles and necessary tiffin baskets for food, if desired, should be taken.

(C) TRAVELLING-SERVANTS.

One is usually accompanied by a native traveling or personal servant, who can speak English and who should have good references.

Women may travel with recommended men servants without hesitation.

(D) ACCOMMODATIONS ON TRAINS.

Each compartment is provided with a lavatory.

Booking of luggage, payment of bearers or porters and guarding of compartment during absence should be left to the servant.

Small parcels should be placed well away from the windows at night to guard against thieves.

Arrangement for refreshment at stations can be made with the guard on the train, who will telegraph ahead, free of charge.

Baggage allowance on first-class tickets to be booked in the van car is 125 pounds free. Thirty pounds is allowed on servants' third-class tickets. All excess luggage is charged for at the rate of about 9c for each 20¼ pounds per 100 miles.

(E) RAILROAD RATES.

For commercial travelers taking a trip of about a thousand miles, with one or two stop-overs, the general rate, first-class, would figure about 4c per mile, including stop-overs, carriages and tips.

Third-class for servants would figure about three-fourths of a cent per mile.

Straight first-class railroad fares, not including outside expenses, figure about 1 anna, or 2c per mile.

There is no general license or tax on commercial travelers.

(F) DISTANCES AND TIME TAKEN BETWEEN SOME OF THE IMPORTANT CITIES.

			Time by Mail Trains	
Bombay to Hyderabad	425	miles		
Bombay to Nagpur	300	"		
Bombay to Madras	794	"	32	hours
Bombay to Calcutta	1,250	"	40	"
Bombay to Cawnpore	840	"	24	"
Bombay to Delhi	965	"	27	"
Bombay to Benares	940	"		
Bombay to Lahore	1,162	"	38	"
Bombay to Ahmedabad	310	"		
Bombay to Peshawar	1,450	"	52	"
Madras to Bangalore City	219	"		
Madras to Cochin	420	"		
Madras to Calcutta	1,032	"	39½	"
Calcutta to Allahabad	512	"		
Calcutta to Darjeeling	385	"	20	"
Calcutta to Lucknow	630	"		
Calcutta to Cawnpore	616	"		
Calcutta to Benares	400	"	16¾	"
Calcutta to Agra	805	"		
Calcutta to Delhi	950	"		
Calcutta to Lahore	1,215	"		
Calcutta to Simla	1,180	"		
Calcutta to Peshawar	1,500	"		
Karachi to Lahore	784	"	24½	"
Delhi to Simla	219	"		
Lahore to Peshawar			11½	"

Baggage transportation from railroad stations to hotels in the chief cities, such as Bombay and Calcutta, for five pieces of luggage costs from 3 to 5 rupees, varying according to the distance and the city. General carriage hire for commercial travelers is approximately $1.75 to $2.50 per day.

Travelers should be well supplied with small change.

(G) HOTEL CHARGES.

The general hotel charges, outside of such cities as Bombay, Calcutta, Madras, etc., are about 6 to 8 rupees a day for board and lodging (including meals) with an additional small charge for baths. Servants are not, as a rule, charged for in hotels, when accompanying their masters. After a stay of a week or ten days in a hotel, $1.00 or $1.50 is sufficient for the servants' box. Dak-bungalows are usually supplied where there are no hotel accommodations. The charge in such bungalows is about $2.50 to $3.50 per day.

(H) MOTORING.

The roads in and about the large towns and those connecting the principal cities will ordinarily be found good; but most of the smaller and outlying roads, particularly at certain seasons of the year, will be found bad, and, during the monsoon, quite often impassable. The price of petrol is exceedingly high, and in motoring for any distance, it is generally necessary to make arrangements for such supply of petrol ahead. Service stations are few and far between, which necessitates carrying a plentiful supply of spare tires.

Shipment of cars to India requires their being crated, tires removed and oil and grease removed from the engine as well as other parts as far as possible. The cost of packing or crating a car for shipment is about $25.00 to $35.00, and the freight is about $75.00 to $150.00; both prices depending on the size of the car. Import duty on cars is 5% ad valorem.

(I) SERVANTS.

The white man in India must expect and demand courtesy from the natives and service from those whom he employs. He must put himself in no way under obligation to a low caste Hindu or native. He must not ride in street cars, in certain localities where he observes it is not the custom to do so. He must always keep his dignity and self-respect beyond reproach. He must treat natives and servants justly; but must be firm with them.

The minimum household of domestic servants for a family consisting of man, wife and child would be seven or eight. Such a menage would cost about 200 rupees a month. (The wages for domestic servants having recently increased about 50%.) These prices are current in Calcutta, but would not apply in the same proportion to all other places in India. A man's personal servant or traveling servant, generally costs from 30 to 45 rupees per month. There is a special servant for each type of work, and it is not possible to get one servant to do various odd jobs about the house. Servants are usually engaged on a contract, to which both parties have to live up to. In the cities where one has lodgings or an apartment, a separate room for servants, elsewhere in the town, is generally rented along with the apartment. In the suburbs and where one has a bungalow, outhouses for the servants' use are customary. It is customary, too, for the head servant to employ the other servants. When traveling, the personal servant should attend to all tipping, luggage and minor details. After a visit with friends it is customary to make a present to their head servant. For a visit of a week to ten days, 5 rupees is sufficient. If one employs a chauffeur it is customary for the chauffeur to purchase the necessary spare parts, etc., for the car. He generally buys more than is necessary and gets a rake-off (graft) from the dealers. It is quite customary, however.

(J) MAIL.

Letters from this country to India should bear a 5c postage stamp.

Individuals should always be addressed as Esquire, not Mister.

The days of closing for foreign mails are the same throughout the year. In Calcutta they are every Friday, in Bombay every Sunday, in Madras every Saturday. Mail from the United States generally takes in transit 21 to 26 days; passenger steamers about 30 days, and freight about 40 to 45 days, these times depending largely on the steamers and ports of call.

In India it is not considered good form to make business calls before 10.30 or 11.00 A. M. unless by previous appointment. Nor should firms be approached for the first time on mailing days.

(K) DOCTORS' FEES.

Physicians' ordinary visiting fees are about 15 rupees.

(L) CABLE RATES.

Cable rates from the United States to India are 66c per word; full rate 33c per word deferred rate.

(M) TELEGRAPH RATES.

Inland.

For express telegrams of 12 words.....	1 Rs.— 8 Annas
Each additional word over 12 words.....	2 Annas
For ordinary telegrams of 12 words.....	12 Annas
Acknowledgment of receipt	12 Annas
Copies of telegrams, 10 words or less.....	4 Annas

Addresses are charged for.

(N) TELEPHONE RATES.

In Calcutta the telephone rates are approximately as follows:

Exchange Lines Within the Four-mile Radius of Exchange.

Business and professional premises.....	250 rupees per year
Residences	175 rupees per year
Extensions, internal	70 rupees per year
Extensions, external, not exceeding 100 yards	105 rupees per year

Private Lines.

Length not exceeding ½ mile.....150 rupees per year
Length not exceeding 1 mile.....180 rupees per year

For every additional one-half mile, add about 30 rupees per year.

(O) INDIAN CURRENCY.

3 Pies	1 Pice
4 Pice	1 Anna
16 Annas	1 Rupee
Gold Mohur	16 Rupees
A Lakh	100,000 Rupees
A Crore	100 Lakhs

The silver pieces are Rupees, 8 Anna pieces, 4 Anna pieces and 2 Anna pieces.

The nickel silver pieces are: The 1 Anna piece.

The copper pieces are: The 2 Pice, 1 Pice, ½ Pice and 1 Pie.

The standard value of the rupee in American currency is .324c. In English currency 10 Rupees to the pound.

(P) INDIAN TIME.

Standard time in India is 5½ hours in advance of Greenwich time. The railroads now run on standard time. For railroad purposes the hours are counted from midnight up to 24.

The difference of local time in India is as follows:

Standard time in advance of Madras	1	minute
Standard time in advance of Bombay	39	"
Standard time in advance of Allahabad	2	"
Standard time in advance of Delhi	22	"
Standard time in advance of Karachi	61	"
Standard time in advance of Lahore	37	"
Standard time behind Calcutta	24	"
Standard time behind Chittagong	37	"

In Burma standard time is 6½ hours in advance of Greenwich time.

(Q) APPROACHING OFFICIALS OF NATIVE STATES.

A representative desiring to do business with the officials of a native state must obtain proper permission and introduction. Such permission can be obtained through the British Resident, an introduction to whom can be got by applying to the representative of the United States Government stationed nearest to the applicant, or through some influential Englishman whom the salesman may have met in India. Some rulers of native states are far more progressive than others and are continually on the lookout for up-to-date methods of industrial development, sanitation and general improvement of their domains.

(R) INDIAN WEIGHTS AND MEASURES.

The Indian system of weights and measures varies considerably in different localities. In general the weights and measures are as follows:

In Northern India and in the standard system the tola is 180 grains troy (the exact weight of a rupee).

The seer, 2.057 pounds.

The maund, 82.28 pounds.

In Bengal the maund is 82 2/7 pounds avoirdupois, or 40 seers or 100 troy pounds.

In Bombay the maund is about 28 pounds.

In Madras the maund is about 25 pounds.

The seer is 80 tola, or 2.057 pounds avoirdupois.

The tola is 180 grains, or .4114 ounce avoirdupois.

The guz of Bengal is 36 inches.

The bigha, or (⅝ of an acre) is the unit for square measurement in India.

The masha is ½ tola.

The ruttee is ⅛ masha.

The factory weight maund is about 74 2/3 pounds.

The bazaar weight maund is about 82⅛ pounds.

Dry and liquid goods in Calcutta, Bombay and Madras are sold by the weight.

Cotton is weighed per bale of 392 pounds net.

Wheat is weighed per bag of 2 hundredweight (112 pounds to cwt.).

Oil seeds are weighed per bag of 1½ cwt.

Wool is weighed per bale of 336 pounds.

Jute is weighed per bale of 400 pounds.

Opium is weighed per chest of 140 1/7 pounds.

Retailing prices are generally expressed in terms of seers to the rupee. Namely, when the figure of quantity has gone up, it means the price is cheaper, and vice-versa. The Indian prices, therefore, might be said to be quantity prices and not money prices.

(S) BRITISH INDIAN COASTAL SAILINGS.

From Calcutta to Rangoon—(direct) Tuesdays, Fridays and Sundays.

From Calcutta to Singapore—Fridays and Sundays (transship for Rangoon).

From Calcutta to Straits—(direct) generally fortnightly.

From Calcutta to Ceylon, Malabar Ports and Bombay—As inducement offers. (Generally one or two ships a month.)

From Calcutta to Mauritius—(via Colombo) every four weeks.

From Bombay to Karachi—(direct) Fridays.

From Bombay to Karachi—(via Porebunder, Dwarka, Cutchmandijie) Mondays.

From Bombay to Karachi and Persian Gulf Ports—Thursdays.

From Bombay to all other coastal ports—As inducement offers, but generally one or two ships monthly.

From Karachi to Bombay—(via outports) Mondays.

From Karachi to Bombay—(direct) Thursdays.

From Karachi to Persian Gulf Ports—Tuesdays.

From Karachi to all other coastal ports—As inducement offers.

(T) INTEREST TABLE.

From 5 to 12% on Rupees 100.

Calculated for 1 year, 1 month (calendar), 1 week and 1 day (365 to year).

The decimal fraction of a Pie for the day being shown for the day.

Per Cent	*1 Day*			*1 Week*			*1 Month*			*1 Year*		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
5	0	0	2:630	0	1	6	0	6	8	5	0	0
6	0	0	3:156	0	1	10	0	8	0	6	0	0
7	0	0	3:682	0	2	1	0	9	4	7	0	0
8	0	0	4:208	0	2	5	0	10	8	8	0	0
9	0	0	4:734	0	2	9	0	12	0	9	0	0
10	0	0	5:260	0	3	0	0	13	4	10	0	0
11	0	0	5:786	0	3	4	0	14	8	11	0	0
12	0	0	6:312	0	3	8	1	0	0	12	0	0

RUPEES TO DOLLARS.

Rupees.	0	1	2	3	4	5	6	7	8	9
		$0.3244	$0.6489	$0.9733	$1.2977	$1.6222	$1.9466	$2.2710	$2.5955	$2.9199
10	$3.2443	3.5688	3.8932	4.2176	4.5421	4.8665	5.1909	5.5154	5.8398	6.1642
20	6.4887	6.8131	7.1375	7.4620	7.7864	8.1108	8.4353	8.7597	9.0841	9.4086
30	9.7330	10.0574	10.3819	10.7063	11.0307	11.3552	11.6796	12.0040	12.3285	12.6529
40	12.9773	13.3018	13.6262	13.9506	14.2751	14.5995	14.9239	15.2484	15.5728	15.8972
50	16.2217	16.5461	16.8705	17.1950	17.5194	17.8438	18.1683	18.4927	18.8171	19.1416
60	19.4660	19.7904	20.1149	20.4393	20.7637	21.0882	21.4126	21.7370	22.0615	22.3859
70	22.7103	23.0348	23.3592	23.6836	24.0081	24.3325	24.6569	24.9814	25.3058	25.6302
80	25.9547	26.2791	26.6035	26.9280	27.2524	27.5768	27.9013	28.2257	28.5501	28.8746
90	29.1990	29.5234	29.8479	30.1723	30.4967	30.8212	31.1456	31.4700	31.7945	32.1189

DOLLARS TO RUPEES.

Dollars.	0	1	2	3	4	5	6	7	8	9
	Rupees.	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*	*Rupees.*
		3.082	6.165	9.247	12.329	15.411	18.494	21.576	24.658	27.741
10	30.823	33.905	36.988	40.070	43.152	46.234	49.317	52.399	55.481	58.564
20	61.646	64.728	67.811	70.893	73.975	77.057	80.140	83.222	86.304	89.387
30	92.469	95.551	98.634	101.716	104.798	107.880	110.963	114.045	117.127	120.210
40	123.292	126.374	129.457	132.539	135.621	138.703	141.786	144.868	147.950	151.033
50	154.115	157.197	160.279	163.362	166.444	169.526	172.609	175.691	178.773	181.856
60	184.938	188.020	191.102	194.185	197.267	200.349	203.432	206.514	209.596	212.679
70	215.761	218.843	221.925	225.008	228.090	231.172	234.255	237.337	240.419	243.502
80	246.584	249.666	252.748	255.831	258.913	261.995	265.078	268.160	271.242	274.325
90	277.407	280.489	283.571	286.654	289.736	292.818	295.901	298.983	302.065	305.148

ANNAS AND PIES TO DECIMALS OF A RUPEE.

In line with the annas in left-hand column and in the same column with the pies at the top the decimal is found. Thus the decimal corresponding to 5 annas 6 pies is 0.3437; conversely, for 0.6615 rupee the value is 10 annas 7 pies.

	0	1	2	3	4	5	6	7	8	9	10	11
0		0.0052	0.0104	0.0156	0.0208	0.0260	0.0312	0.0365	0.0417	0.0469	0.0521	0.0573
1	0.0625	.0677	.0729	.0781	.0833	.0885	.0937	.0990	.1042	.1094	.1146	.1198
2	.1250	.1302	.1354	.1406	.1458	.1510	.1562	.1615	.1667	.1719	.1771	.1823
3	.1875	.1927	.1979	.2031	.2083	.2135	.2187	.2240	.2292	.2344	.2396	.2448
4	.2500	.2552	.2604	.2656	.2708	.2760	.2812	.2865	.2917	.2969	.3021	.3073
5	.3125	.3177	.3229	.3281	.3333	.3385	.3437	.3490	.3542	.3594	.3646	.3698
6	.3750	.3802	.3854	.3906	.3958	.4010	.4062	.4115	.4167	.4219	.4271	.4323
7	.4375	.4427	.4479	.4531	.4583	.4635	.4687	.4740	.4792	.4844	.4896	.4948
8	.5000	.5052	.5104	.5156	.5208	.5260	.5312	.5365	.5417	.5469	.5521	.5573
9	.5625	.5677	.5729	.5781	.5833	.5885	.5937	.5990	.6042	.6094	.6146	.6198
10	.6250	.6302	.6354	.6406	.6458	.6510	.6562	.6615	.6667	.6719	.6771	.6823
11	.6875	.6927	.6979	.7031	.7083	.7135	.7187	.7240	.7292	.7344	.7396	.7448
12	.7500	.7552	.7604	.7656	.7708	.7760	.7812	.7865	.7917	.7969	.8021	.8073
13	.8125	.8177	.8229	.8281	.8333	.8385	.8437	.8490	.8542	.8594	.8646	.8698
14	.8750	.8802	.8854	.8906	.8958	.9010	.9062	.9115	.9167	.9219	.9271	.9322
15	.9375	.9427	.9479	.9531	.9583	.9635	.9687	.9740	.9792	.9844	.9896	.9948

15.

AMERICA'S CHIEF FAULTS IN TRADING WITH INDIA.

The United States in developing and promoting its foreign trade on a more extensive basis, has not only certain outstanding faults to overcome, but in addition is handicapped by the results of some economic causes. With a large domestic market and many areas of this country only slightly developed our manufacturers have not had the incentive, due to lack of necessity, to turn their interest to foreign trade. Such interest, however, was forced upon them during the war and the years directly following the war; and India became one of the active markets and one of the largest fields for American merchandise. Wholly unprepared and uneducated as we were for this trade, it was natural that our opportunity should not be grasped and carefully fostered; but should be lost again in the restoration to more normal conditions. However temporary the influx of American goods in India may have been, it did serve a purpose; that purpose was obtaining a foothold on the Indian market, the education of the country, to a small extent, to American industrial methods and development and served to show the varieties of articles which this country was in a position to supply. In all, it broadened the view of Indian buyers and was a great education to merchants and manufacturers in this country.

Such a sudden turn to a new market for our merchandise was bound to point out many faults in trade, which lesson, through even costly experience to many, has not been made the most of.

Outstanding among America's faults and inefficiencies in her trade with India can be mentioned the following:

1. Lack of personal interest and a careful study of the desires of the buyer, the conditions of the country and the route and handling of the merchandise once it has been put on the ship in this country.

2. The idea that the Indian market can be entered and left in correspondingly good and bad times, without any serious detriment to America's trade.

3. The endeavor by American manufacturers and merchants to get a large slice of India's trade without the willingness to spend even a portion of the money they outlay to get trade from the domestic market.

4. Inattention to details of the order, and trying to sell to India what we think India should have rather than what India needs and wants.

5. Careless packing and marking of merchandise.

6. Not sending the best type of American representative to the country to represent our wares.

7. Dealing in India entirely too much through the large European import and wholesale houses instead of establishing our own branch offices with proper staffs, however small.

8. Lack of that type of support accorded by foreign banks to their merchants—individual firms in many cases are obliged to carry the burden.

9. Lack of a good and efficient merchant marine, whereby our freight rates and shipping schedules will be such as to compete favorably with foreign countries.

The above might be said to cover our greatest faults in trade with India, some of which are due to carelessness, etc., and some to economic causes and lack of proper legislation or government support. India is a tremendous market and can consume vast quantities of manufactured and semi-manufactured goods. The development of the country is only in its infancy, but is making rapid strides. India, with the possible exception of China, is the largest independent market in the world. It is continually becoming broader in its

views through contact with the other markets of the world. Though there is much British prejudice to be overcome, the people as a whole are becoming more and more partial to American articles. If manufacturers and merchants would properly study and organize for this market with the idea of permanently establishing themselves there, they will find a just reward, providing they have the right article. Many articles for which there previously was no demand in India, have, through proper education of the people and introduction of the articles, become popular wares. It is to be hoped, therefore, that this market will receive early and careful attention, and will not be left as a harvest for others, more farsighted, to reap.